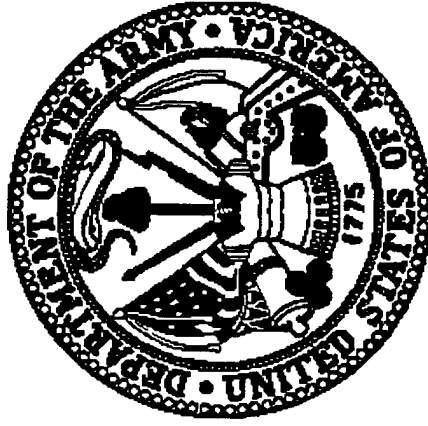


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DEPARTMENT OF THE ARMY

PROCUREMENT PROGRAMS



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FY1998/FY1999 BUDGET REQUEST

PROCUREMENT OF AMMUNITION, ARMY

Appropriation

DATE: February 1997

19970304 018

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Phone Conf Per: Larry Stopher

Print or Type Name

697-6241

Telephone Number


Authorized Signature/Date

SUMMARY
Budget Plan (amounts for
actions programmed)

Identification code 21-2034-0-1-051

1996 actual 1997 est. 1998 est. 1999 est.

Program by activities:

Direct program:

00.0101 Ammunition
00.0201 Ammunition production base support

00.9101 Total direct program

01.0101 Reimbursable program

10.0001 Total

Financing:

Offsetting collections from:

11.0001 Federal funds(-)

14.0001 Non-Federal sources(-)

17.0001 Recovery of prior year obligations

21.4002 Unobligated balance available, start of year:

21.4003 For completion of prior year budget plans

21.4009 Available to finance new budget plans

22.1001 Reprogramming from/to prior year budget plans

22.2001 Unobligated balance transferred to other accounts

22.2001 Unobligated balance transferred from other accounts (-)

24.4002 Unobligated balance available, end of year:

24.4003 For completion of prior year budget plans

24.4003 Available to finance subsequent year budget plans

25.0001 Unobligated balance expiring

39.0001 Budget authority

Budget authority:

40.0001 Appropriation

40.3601 Appropriation rescinded (unob bal)

40.7501 Reduction pursuant to P.L. 104-208 (-), 8138

41.0001 Transferred to other accounts (-)

43.0001 Appropriation (adjusted)

Relation of obligations to outlays:

71.0001 Obligations incurred

72.1001 Orders on hand, SOY

72.4001 Obligated balance, start of year

74.1001 Orders on hand, EOY

74.4001 Obligated balance, end of year

77.0001 Adjustments in expired accounts (net)

78.0001 Adjustments in unexpired accounts

90.0001 Outlays (net)

821,970	895,115	694,177	801,629
230,926	230,975	196,725	174,344
1,052,896	1,126,090	890,902	975,973
10,789	72,800	61,100	62,800
1,063,685	1,198,890	952,002	1,038,773

-7,504	-41,800	-40,600	-39,300
-3,285	-31,000	-20,500	-23,500

-10,758	-4,500		
700	800		
	-800		

4,500			
-115			

1,047,223	1,121,590	890,902	975,973
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1,098,212	1,127,149	890,902	975,973
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-4,500			
-1,059			

-50,989			
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1,047,223	1,121,590	890,902	975,973
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Obligations

Identification code	21-2034-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Program by activities:					
Direct program:					
00.0101	Ammunition	896,881	880,158	684,405	795,886
00.0201	Ammunition production base support	209,286	232,297	247,523	179,415
00.9101	Total direct program	1,106,167	1,112,455	931,928	975,301
01.0101	Reimbursable program	13,407	78,509	61,100	62,800
10.0001	Total	1,119,574	1,190,964	993,028	1,038,101
Financing:					
Offsetting collections from:					
11.0001	Federal funds(-)	-5,133	-41,800	-40,600	-39,300
14.0001	Non-Federal sources(-)	-1,959	-31,000	-20,500	-23,500
17.0001	Recovery of prior year obligations	-27,309			
21.4002	Unobligated balance available, start of year:				
21.4003	For completion of prior year budget plans				
21.4009	Available to finance new budget plans				
22.1001	Reprogramming from/to prior year budget plans	700			
22.2001	Unobligated balance transferred to other accounts				
24.4002	Unobligated balance transferred from other accounts (-)				
24.4003	Unobligated balance available, end of year:				
25.0001	For completion of prior year budget plans				
	Available to finance subsequent year budget plans				
	Unobligated balance expiring				
39.0001	Budget authority	1,047,223	1,121,590	890,902	975,973
Budget authority:					
40.0001	Appropriation	1,098,212	1,127,149	890,902	975,973
40.3601	Appropriation rescinded (unob bal)		-4,500		
40.7501	Reduction pursuant to P.L. 104-208 (-), 8138		-1,059		
41.0001	Transferred to other accounts (-)	-50,989			
43.0001	Appropriation (adjusted)	1,047,223	1,121,590	890,902	975,973
Relation of obligations to outlays:					
71.0001	Obligations incurred	1,112,482	1,118,164	931,928	975,301
72.1001	Orders on hand, SOY	-13,084	-14,419	-14,419	-14,419
72.4001	Obligated balance, start of year	1,477,541	1,684,451	1,593,337	1,571,461
74.1001	Orders on hand, EOY	14,419	14,419	14,419	14,419
74.4001	Obligated balance, end of year	-1,684,451	-1,593,337	-1,571,461	-1,574,448
77.0001	Adjustments in expired accounts (net)	-4,572			
78.0001	Adjustments in unexpired accounts	-27,309			
90.0001	Outlays (net)	875,026	1,209,278	953,804	972,314

Identification code	21-2034-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Direct obligations:					
121.001	Travel and transportation of persons	39	34	30	34
122.001	Transportation of things	8,882	7,656	6,859	7,733
125.101	Advisory and assistance services	80	84	88	92
125.201	Other services with the private sector	401,234	345,834	309,835	349,321
126.001	Supplies and materials	692,617	755,990	612,556	615,235
131.001	Equipment	3,315	2,857	2,560	2,886
199.001	Total Direct obligations	1,106,167	1,112,455	931,928	975,301
Reimbursable obligations:					
222.001	Transportation of things	135	734	616	633
225.201	Other services with the private sector	6,069	32,953	27,657	28,427
226.001	Supplies and materials	7,153	44,553	32,602	33,508
231.001	Equipment	50	269	225	232
299.001	Total Reimbursable obligations	13,407	78,509	61,100	62,800
999.901	Total obligations	1,119,574	1,190,964	993,028	1,038,101

PROCUREMENT OF AMMUNITION, ARMY

APPROPRIATION LANGUAGE

For construction, procurement, production, and modification of ammunition, and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including ammunition facilities authorized by Section 2854, Title 10, United States Code, and the land necessary therefor, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes; \$890,902,000 in fiscal year FY1998 to remain available for obligation until September 30, 2000, and \$975,973,000 in fiscal year FY1999 to remain available for obligation until September 30, 2001.

**COMPARISON OF FY 1997 PROGRAM REQUIREMENTS
AS REFLECTED IN THE FY 1997 BUDGET
WITH THE FY1997 PROGRAM REQUIREMENTS AS
SHOWN IN THE FY 1998/1999 BUDGET
SUMMARY OF REQUIREMENTS (\$ in millions)**

Appropriation Procurement of Ammunition, Army	FY 1997	FY 1997	
	Requirements Per FY1997 Budget	Requirements Per FY1998/1999 Budget	Increase or (Decrease)
Activity 1 - Ammunition	676	895	219
Activity 2 - Ammunition Production Support	178	231	53
Reimbursable Program	73	73	0
	926	1,199	273

EXPLANATION BY ACTIVITY

Activity 1: Ammunition - The net increase (\$+219.4) resulted from congressional adjustments to CTG 5.56mm AT (\$+1.0), CTG 7.62mm AT (\$+2.1), CTG 9mm AT (\$+1.0), CTG 50 Cal AT (\$+1.0), CTG 20mm AT (\$+0.3) CTG 25mm AT (\$+32.8), Special Purpose Ammunition (\$+4.0), CTG 40mm AT (\$-1.4), 60mm Mortar 1/10 Practice (\$+0.2), 60mm Mortar Illum (+7.0), CTG Mortar 60mm HE M720(\$+10.0), 120mm Smoke XM929 (\$+4.9), 120mm Illum XM930 (\$+6.6), 120mm Full Range Practice M931 (\$+1.5), CTG tank 120mm M829A2 (\$24.0), CTG tank 120mm TP-T M831 (\$+2.4) CTG, Tank 120mm M830A1 (\$+31.0), Proj Artillery 155mm M795 (\$+40.0), Proj Artillery 155mm SADARM (\$+33.5), Mine VOLCANO M87 (\$+15.0), Wide Area Munitions (\$-9.3), Selectable Lightweight Munition (SLAM) (\$+3.0) Bunker Defeat Munitions (\$+10.0), Grenades All Types (\$-3.5) and Signals All Types (\$-8.9).

A proportionate reduction was made for Section 8138 of the FY1997 Appropriations Act (\$-0.8)

Activity 2: Ammunition Production Support- the net increase (\$+53.3) resulted from congressional adjustments to Provision of Industrial Facilities (\$+1.5), Conventional Ammo Demil (\$+7.0), and Armament Retooling and Manufacturing Support (ARMS) (\$+45.0).

A proportionate reduction was made for Section 8138 of the FY1997 Appropriations Act (\$-0.2)

**COMPARISON OF FY 1997 PROGRAM REQUIREMENTS
AS REFLECTED IN THE FY 1998/1999 BUDGET
WITH THE FY1998 PROGRAM REQUIREMENTS AS
SHOWN IN THE FY 1998/1999 BUDGET
SUMMARY OF REQUIREMENTS (\$ in millions)**

Appropriation Procurement of Ammunition, Army	FY 1997		FY 1998		Increase or (Decrease)
	Requirements Per FY1998/1999 Budget		Requirements Per FY1998/1999 Budget		
Activity 1 - Ammunition	895		694		(201)
Activity 2 - Ammunition Production Support	231		197		(34)
Reimbursable Program	73		61		(12)
	1,199		952		(235)

EXPLANATION BY ACTIVITY

Activity 1: Reductions in activity 1 (ammunition hardware) result from the FY 1997 congressional add of \$219 million for training, war reserve, and production base support items.

Activity 2: Reductions in activity 2 result from the FY 1997 congressional add of \$53 million for the Armament Retooling and Manufacturing Support Initiative and miscellaneous production base improvements.

Reimbursable Program: FY1998 reimbursable program decrease is due to the amount of projected services to be sold by the Army to defense contractors.

**COMPARISON OF FY 1998 PROGRAM REQUIREMENTS
AS REFLECTED IN THE FY 1998/1999 BUDGET
WITH THE FY1999 PROGRAM REQUIREMENTS AS
SHOWN IN THE FY 1998/1999 BUDGET
SUMMARY OF REQUIREMENTS (\$ in millions)**

Appropriation Procurement of Ammunition, Army	FY 1998	FY 1999	Increase or (Decrease)
	Requirements Per FY1998/1999 Budget	Requirements Per FY1998/1999 Budget	
Activity 1 - Ammunition	694	802	108
Activity 2 - Ammunition Production Support	197	174	(23)
Reimbursable Program	61	63	2
	952	1,039	85

EXPLANATION BY ACTIVITY

Activity 1: Activity 1 (ammunition hardware) includes an increase in procurement of training ammunition even though training support will decrease from 90% to 86% of requirement. Increased procurements are needed because war reserves can no longer be depleted to support training. Procurement of war reserve items decreases from 5 of 15 modernization items to 3 of 15 modernization items.

Activity 2: Activity 2 reflects reductions in the Armament Retooling and Manufacturing Support Initiative (\$5 million), Conventional Ammo Demilitization (\$12.3 million), Maintenance of Inactive Facilities (\$4 million), and Layaway of Industrial Facilities (\$4.3 million).

Reimbursable Program: The FY 1998 reimbursable program increase results from the direct sales by the Army to defense contractors and miscellaneous items under \$2 million.

COMPARISON OF FY 1997 FINANCING
AS REFLECTED IN THE FY 1997 BUDGET
WITH THE FY 1997 FINANCING AS
REFLECTED IN THE FY 1998 BUDGET
SUMMARY OF FINANCING (\$ in millions)

Appropriation	FY 1997	FY 1997	FY 1997	Increase or (Decrease)
Procurement of Ammunition, Army	Financing Per FY 1997 Budget	Financing Per FY 1998 Budget	Financing Per FY 1998 Budget	
Program Requirements (Total)	926	1,199	273	
Program Requirements (Service Account)	853	1,126	273	
Program Requirements (Reimbursable)	73	73	0	
Less:				
Anticipated Reimbursements	(73)	(73)	0	
Proposed Rescissions				

The net increase of \$+273.7 to the Procurement of Ammunition, Army appropriation resulted from the FY 1997 congressional add of \$274.7 million and the \$-1.0 million Section 8138 reduction.

**COMPARISON OF FY 1996 FINANCING
AS REFLECTED IN THE FY 1997 BUDGET
WITH THE FY 1996 FINANCING AS
REFLECTED IN THE FY 1998 BUDGET
SUMMARY OF FINANCING (\$ in millions)**

Appropriation	FY 1996		FY 1996 Financing Per FY 1998 Budget	Increase or (Decrease)
	Procurement of Ammunition, Army	Financing Per FY 1997 Budget		
Program Requirements (Total)		1,125	1,064	(61)
Program Requirements (Service Account)		1,078	1,053	(25)
Program Requirements (Reimbursable)		47	11	(36)
Less:				
Anticipated Reimbursements		(47)	(11)	
Proposed Rescissions				

Direct Program: The FY 1996 President's budget contained a \$-25.0 million anticipated reprogramming for Bosnia. The Bosnia reprogrammings included a total change of \$-45.3 million (FY96-3 PA, \$-7.0 million; FY 96-11, \$-38.3 million) which results in a net change to the FY 1996 President's budget of \$-20.3 million; FY 96-16PA (Omnibus reprogramming), \$-5.7 million; FY 96-26PA (nonlethal weapons), \$+0.8 million.

Reimbursable Program: Orders did not materialize as planned, \$-36 million.

BUDGET ACTIVITY 1

*****UNCLASSIFIED*****
DEPARTMENT OF THE ARMY
FY 98 PROCUREMENT PROGRAM
98 PRES

EXHIBIT P 1
DATE: 10 FEB 97

APPROPRIATION: **AMMUNITION**

ACTIVITY: 1 **AMMUNITION**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLLS)			(THOUSANDS OF DOLLARS)				FY 99 QTY	FY 99 COST
			FY 98 UNIT COST	FY 96 QTY K	FY 96 COST	FY 97 QTY K	FY 97 COST	FY 98 QTY K	FY 98 COST		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	SMALL/MEDIUM CALIBER AMMUNITION										
1	CTG, 5.56MM, ALL TYPES (E00700)	A			58166		30723		63588		107411
2	CTG 5.56MM ARMOR PIERCING XM995 (F47600)	A	1405	815	1945	1438	1998	1406	1976	1375	1979
3	CTG, 7.62MM, ALL TYPES (E02000)	A			5361		5965		1136		21656
4	CTG 7.62MM ARMOR PIERCING XM993 (F47500)	A	1968	1520	3944	1030	1998	1013	1994	982	1979
5	CTG, 9MM, ALL TYPES (EA3000)	A			4580		999		4229		2724
6	CTG, .45 CAL, ALL TYPES (ER8110)	A			26708		4949		19977		24216
7	CTG, .50 CAL, ALL TYPES (E08000)	A			1944	300	2044	286	1994		
8	CTG CAL .50 API MK211 MOD 0 (F47400)	A	6972	290							
9	CTG, 20MM, ALL TYPES (E08900)	A					300				
10	CTG, 25MM, ALL TYPES (E08200)	A			68179		79924		88166		50005
11	CTG, 30MM, ALL TYPES (ER8120)	A			4169		9991		10357		7273
12	CTG, 40MM, ALL TYPES (ER8001)	A			48873		32969		26203		36845
	SUB-ACTIVITY TOTAL				223869		171860		219693		254090
	MORTAR AMMUNITION										
13	CTG MORTAR 60MM 1/10 PRAC M766 (E72000)	A		5	3581	7	5214			2	2677
14	CTG MORTAR 60MM ILLUM M721/M767 (E70400)	A		52	22378	28	13139				
15	CTG MORTAR 60MM SMOKE WP M722 (E70500)	A	206260					23	4744		
16	CTG MORTAR 60MM HE M720 (E67303)	A				60	9991				

APPROPRIATION: **AMMUNITION**

ACTIVITY: 1 **AMMUNITION**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS)		(THOUSANDS OF DOLLARS)					
			FY 98 UNIT COST	FY 96 QTY K	FY 96 COST	FY 97 QTY K	FY 97 COST	FY 98 QTY K	FY 98 COST	FY 99 QTY K COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11) (12)
17	CTG MORTAR 81MM ILLUM M853A1 (E76100)	A								23 11773
18	CTG MORTAR 81MM SMOKE RP M819 (E76200)	A								24 10730
19	CTG MORTAR 81MM PRAC 1/10 RANGE M860 (E19800)	A		18	6564					
20	CTG MORTAR 120MM FULL RANGE PRACTICE M931 (E25507)	A	414101	37	18244	127	50952	59	24432	77 32159
21	CTG MORTAR 120MM HE M934 W/MO FUZE (E25501)	A	934625					32	29908	12 29888
22	CTG MORTAR 120MM ILLUM XM930 W/MTSQ FZ (E25503)	B				11	25975			
23	CTG MORTAR 120MM SMOKE M929 W/MO FUZE (E25504)	A		57	65812	27	34967			
	SUB-ACTIVITY TOTAL				116579		140238		59084	87227
	TANK AMMUNITION									
24	CTG 120MM APFSDS-T M829A2/M829E3 (E78001)	A	3472380	23	79808	29	103606	21	72920	
25	CTG 120MM HEAT-MP-T M830A1 (E78007)	A				9	30971			
26	CTG TANK 120MM TP-T M831/M831A1 (E73300)	A	652825	40	29053	93	54576	80	52226	68 46525
27	CTG TANK 120MM TPCSDS-T M865 (E73400)	A	606809	132	89975	211	115542	184	111653	160 103515
	SUB-ACTIVITY TOTAL				198836		304695		236799	150040
	ARTILLERY AMMUNITION									
28	CTG ARTY 75MM BLANK M337A1 (E15200)	A	42342	39	1459			70	2964	34 1455
29	CTG ARTY 105MM DRICM XM915 (E53500)	B				6	14172			

APPROPRIATION: **AMMUNITION**

ACTIVITY: 1 **AMMUNITION**

LINE NO.	ITEM NONENCLATURE	ID	(DOLS)		(THOUSANDS OF DOLLARS)					
			FY 98 UNIT COST	FY 96 QTY R COST	FY 97 QTY R COST	FY 98 QTY K COST	FY 99 QTY K COST	FY 98 QTY K COST	FY 99 QTY K COST	FY 99 QTY K COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
30	PROJ ARTY 155MM SHOE WP M825 (E67800)	A			4989		15039		12586	12059
31	PROJ ARTY 155MM HE M795 (E66800)	A		130	55446	84	39962			
32	PROJ ARTY 155MM SADARM M898 (E66300)	B	133942	150	41103	600	93671	507	67909	77572
	SUB-ACTIVITY TOTAL				102997		162844		83459	91086
	ARTILLERY FUZES									
33	FUZE MULTI OPTION (ER8017)									
	SUB-ACTIVITY TOTAL									6056
	MINES									
34	MINE, TRAINING, ALL TYPES (EA0800)	B			3745		1928			
35	MINE AT/AP M87 (VOLCANO) (E72195)	A		10	29162	6	14986			
36	WIDE AREA MUNITIONS (E78100)	B	71269	106	14581	113	9991	215	15323	17891
	SUB-ACTIVITY TOTAL				47488		26905		15323	17891
	ROCKETS									
37	BUNKER DEFEATING MUNITION (BDM) (E88400)	B			14581		9991			
38	ROCKET, HYDRA 70, ALL TYPES (E37300)	A			27302		26711		12067	120683
	SUB-ACTIVITY TOTAL				41883		36702		12067	120683
	OTHER AMMUNITION									
39	DEMOLITION MUNITIONS, ALL TYPES (E55400)	A			30411		23199		18766	17910
40	GRENADES, ALL TYPES (E34000)	B			23939		4164		14637	15480
41	SIGNALS, ALL TYPES (E46900)	A			17802		1281		7862	8369

APPROPRIATION: **AMMUNITION**

ACTIVITY: 1 **AMMUNITION**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS)		(THOUSANDS OF DOLLARS)				FY 98		FY 99	
			FY 98 UNIT COST	FY 98 COST	FY 96 QTY K	FY 96 COST	FY 97 QTY K	FY 97 COST	FY 98 QTY K	FY 98 COST	FY 99 QTY K	FY 99 COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
42	SIMULATORS, ALL TYPES (E51200)	A			3345	2769	4573	5962				
	SUB-ACTIVITY TOTAL				75497	31413	45838	47721				
	MISCELLANEOUS											
43	AMMO COMPONENTS, ALL TYPES (E80016)	A			2135	4916	4823	7054				
44	CAD/PAD ALL TYPES (EA0003)	A			1472	3809	1087	1979				
45	ITEMS LESS THAN \$2 MILLION (EA0055)	A			2039	663	819	804				
46	AMMUNITION PECULIAR EQUIPMENT (EA0575)	A			4860	5648	8627	10654				
47	FIRST DESTINATION TRANSPORTATION (AMMO) (EA0550)	A			4315	5422	6558	6344				
	SUB-ACTIVITY TOTAL				14821	20458	21914	26835				
	ACTIVITY TOTAL				821970	895115	694177	801629				

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE				(E00700)			
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION				CTG 5.56MM ALL TYPES							
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03			
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-			
COST (In Millions)	\$ 58.2	\$ 30.7	\$ 63.6	\$ 107.4	\$ 109.5	\$ 104.5	\$ 119.6				

DESCRIPTION:

This budget line includes 5.56MM ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, 5.56MM, ALL TYPES (E00700)									
DATE									
FEBRUARY 1997									
FY									
96									
FY									
97									
FY									
98									
FY									
99									
FY									
SSN/ITEM:	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
(E00701) CTG 5.56MM BALL M193	0	0.00	0	14325	0.27	3849	0	0.00	0
(E01100) CTG 5.56MM BLANK M200	0	0.00	0	0	0.00	0	18882	0.21	4023
(E01101) CTG 5.56MM BLANK M200 LINKED F/SAW	18742	0.38	7123	2535	0.39	999	38270	0.35	13552
(E04601) CTG 5.56MM BALL M855 F/M16A2	115870	0.39	45189	42984	0.39	16764	104494	0.36	38096
(E04602) CTG 5.56MM TRACER M856 F/M16A2	1491	0.57	850	0	0.00	0	6658	0.53	3538
(E04603) CTG 5.56MM BALL M855 LINKED F/SAW	7550	0.57	4304	0	0.00	0	9801	0.45	4379
(E04604) CTG 5.56MM 4 BALL M855/1 TRACER M856 F/SAW	0	0.00	700	17521	0.52	9111	0	0.00	0
TOTAL P-1 LINE ITEM			58166			30723			63588
									107413

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BALL M193

(E00701)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	14325	-0-	22675	10060	10113	10217	11927
COST (In Millions)	\$ -0-	\$ 3.8	\$ -0-	\$ 6.7	\$ 3.0	\$ 3.1	\$ 3.2	\$ 3.9

DESCRIPTION:

The 5.56mm Ball M193 is an anti-personnel cartridge containing a 56 grain, gilding metal-jacketed bullet with a lead antimony core. It is issued for use in the M16/M16A1 series rifle. This item is Code A, approved for service use. This item will be procured at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. FY 99 procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1975

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1DOC4Z

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
P-1 ITEM NOMENCLATURE:
CTG 5.56MM BALL M193
DATE: FEBRUARY 1997
NSN = 1305-00-926-3970
(E00701)

FY 96 (QTY		FY 97 (QTY		FY 98 (QTY		FY 99 (QTY		22674750)	
ELEMENT OF COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
QW: EACH									
HARDWARE									
1. LOAD, ASSEMBLE, AND PACK (LAP)									
2. BOX METAL M2A1	14324920	0.19	2702				22674750	0.22	4982
3. PROPELLANT WC844 (LB)	17907	5.03	90				28344	5.86	166
	59306	5.74	341				93874	6.69	628
SUBTOTAL			3133						5776
PRODUCTION SUPPORT									
1. PRODUCTION ENGINEERING									590
2. QUALITY ASSURANCE			143						14
3. ACCEPTANCE TESTING			4						66
4. INTERIM TRANSPORTATION			34						42
5. INDUSTRIAL STOCK SUPPORT			30						205
6. CAWCF GAIN/LOSS SURCHARGE			124						
			381						
SUBTOTAL			716						917
TOTAL P-1 LINE ITEM			3849						6693

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-00-926-3970

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BALL M193

(E00701)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1994	OLIN CORP	SS/CPAF	IOC	NOV 93	OCT 94	30233400	.19			
FY 1997	INDEPENDENCE, MO	SS/CPAF	IOC	MAR 97	OCT 97	14324920	0.19	YES	NO	
FY 1999	OLIN CORP	SS/CPAF	IOC	NOV 98	OCT 99	22674750	0.22			
2. BOX METAL M2A1										
FY 1994	BROCKWAY STANDARD	C/FP	IOC	JAN 94	JUL 94	37792	5.68			
FY 1997	HOMERVILLE, GA	C/FP	IOC	APR 97	AUG 97	17907	5.03	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	28344	5.86			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 1

PAGE NO. 5 of 48

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-00-926-3970

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BALL M193

(E00701)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. PROPELLANT WC844 (LB) **										
FY 1994	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 94	SEP 94	128493	5.98			
FY 1997	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	59306	5.74	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	93874	6.69			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 1

PAGE NO. 6 of 48

EXHIBIT P-5A

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE: FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL:
DD-COMP (AR) 1092

APPROPRIATION/BUDGET ACTIVITY: P-1 ITEM NOMENCLATURE: CTG 5.56MM BALL M193

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FISCAL YEAR: 97

FISCAL YEAR: 98

FISCAL YEAR: 99

CALENDAR YEAR: 96

CALENDAR YEAR: 97

CALENDAR YEAR: 98

CALENDAR YEAR: 99

CALENDAR YEAR: 00

CALENDAR YEAR: 01

CALENDAR YEAR: 02

CALENDAR YEAR: 03

CALENDAR YEAR: 04

CALENDAR YEAR: 05

CALENDAR YEAR: 06

CALENDAR YEAR: 07

CALENDAR YEAR: 08

CALENDAR YEAR: 09

CALENDAR YEAR: 10

CALENDAR YEAR: 11

CALENDAR YEAR: 12

CALENDAR YEAR: 13

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CALENDAR YEAR: 15

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CALENDAR YEAR: 40

CALENDAR YEAR: 41

CALENDAR YEAR: 42

CALENDAR YEAR: 43

CALENDAR YEAR: 44

CALENDAR YEAR: 45

CALENDAR YEAR: 46

CALENDAR YEAR: 47

CALENDAR YEAR: 48

CALENDAR YEAR: 49

CALENDAR YEAR: 50

CALENDAR YEAR: 51

CALENDAR YEAR: 52

CALENDAR YEAR: 53

CALENDAR YEAR: 54

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES				MAYBE TO REACH MAX AFTER D-DAY			
		MINIMUM	1-B-5	MAXIMUM	1-B-5	MINIMUM	1-B-5	MAXIMUM	1-B-5
1	LAKE CITY AAP, IND MO	0.00	20.90	72.80	5				
2	OLIN, ST MARKS, FL	0.70	0.83	1.00	0				

PROCUREMENT LEAD TIME				REMARKS			
INITIAL	REORDER	6	2	11	13	TOTAL	AFTER 1 OCT

FAC NO.				MANUFACTURER NAME & LOCATION				REMARKS			
INITIAL	REORDER	6	2	11	13	TOTAL	AFTER 1 OCT	UALT	ALT	PLT	TOTAL

REQUIREMENTS CONTROL SYMBOL.
DD-COMP (AR) 1092

APPROPRIATION/BUDGET ACTIVITY

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

[illegible]

PROCUREMENT AMMUNITION ARMY / ACTIVITY 1 AMMUNITION

ITEM NOMENCLATURE

1000

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REACH MAX AFTER 5-DAY
		MINIMUM SUST.	1-B-5 MAXIMUM	
1	LAKE CITY AAP, IND MO	0.00	20-90	72.80
2	OLIN, ST MARKS, FL	0.70	0.83	1.00

PROCUREMENT LEAD TIME				
	ADMIN LEADTIME		PROD.	TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT		
INITIAL	6	2	11	13
REORDER	6	2	11	13

REMARKS
PACING COMPONENT = LB

	UALT	ALT	PLT	TOTAL
INITIAL	6	11	1	12
REORDER	6	11	1	12

QUANTITY IN MILLIONS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE										(E01100)	
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION				CTG 5.56MM BLANK M200											
	FY	96	FY	97	FY	98	FY	99	FY	00	FY	01	02	FY	03
QUANTITY (Thousands)		-0-		-0-		18882		83163		84400		84855		85739/85689	
COST (In Millions)	\$	-0-	\$	-0-	\$	4.0	\$	18.1	\$	18.8	\$	19.3	\$	19.9/20.4	

DESCRIPTION:

This cartridge is used for simulated firing in training maneuvers and for saluting purposes in the M16 Series Rifle and Squad Automatic Weapon. A blank-firing attachment on the weapon is required for firing automatic or semi-automatic weapons. The cartridge can be identified by the rose petal (rosette crimp) closure on the mouth and by the identification knurl about one-half inch from the base of the cartridge. The mouth of the cartridge is sealed and identified with lacquer. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

Prior to 1977

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QMIDOC4Z

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305-00-182-3217
(E01100)P-1 ITEM NOMENCLATURE:
CTG 5.56MM BLANK M200

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FY 96 (QTY)		FY 97 (QTY)		FY 98 (QTY)		FY 99 (QTY)		83162593	
ELEMENT OF COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
QM: EACH									
HARDWARE									
1. LOAD ASSEMBLY, AND PACK (LAP)									
2. BOX METAL M2A1				18882042	0.17	3251	83162593	0.18	14620
3. PROPELLANT				16806	5.74	96	74015	5.86	434
WC814 (LB)				18883	6.55	124	83163	6.69	556
SUBTOTAL						3471			15610
PRODUCTION SUPPORT									
1. PRODUCTION ENGINEERING						355			1595
2. QUALITY ASSURANCE						9			39
3. ACCEPTANCE TESTING						40			180
4. INTERIM TRANSPORTATION						25			112
5. INDUSTRIAL STOCK SUPPORT						123			553
SUBTOTAL						552			2479
TOTAL P-1 LINE ITEM						4023			18089

PCN P02QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-00-182-3217

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BLANK M200

(E01100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1994	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 93	OCT 94	90105600	.16			
FY 1998	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 97	OCT 98	18882042	0.17	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	83162593	0.18			
2. BOX METAL M2A1										
FY 1994	BROCKWAY STANDARD HOMERVILLE, GA	C/FP	IOC	JAN 94	JUL 94	81096	5.68			
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	16806	5.74	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	74015	5.86			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 1 PAGE NO. 13 of 48

EXHIBIT P-5A

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-00-182-3217

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BLANK M200

(E01100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. PROPELLANT WC814 (LB) **										
FY 1994 OLIN ST. MARKS, FL		SS/FP	IOC	AUG 94	SEP 94	91909	5.98			
FY 1998 OLIN ST. MARKS, FL		SS/FP	IOC	AUG 98	SEP 98	18883	6.55	YES	NO	
FY 1999 OLIN ST. MARKS, FL		SS/FP	IOC	AUG 99	SEP 99	83163	6.69			

REMARKS:

** PACING COMPONENT

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BLANK M200 LINKED F/SAW

(E01101)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	18742	2535	38270	27714	28122	28286	28563	28559
COST (In Millions)	\$ 7.1	\$ 1.0	\$ 13.6	\$ 10.0	\$ 10.4	\$ 10.7	\$ 11.0	\$ 11.3

DESCRIPTION:

The 5.56mm blank M200 round is a standard blank cartridge currently used during training to simulate live-ammunition noises and flash. This round is linked in 200 round belts and loaded into a plastic ammunition container that attaches directly to the M249 Squad Automatic Weapon (SAW). Four plastic containers are packed in a PA108 container. The M249 SAW is a lightweight, belt-fed, one-man operable machine gun. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1982

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1DOC42

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305-01-258-8694
(E01101)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:
CTG 5.56MM BLANK M200 LINKED F/SAW

		FY 96	(QTY	18741997)	FY 97	(QTY	2535000)	FY 98	(QTY	38270093)	FY 99	(QTY	27714208)
ELEMENT OF COST		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
QM: EACH			COST			COST			COST			COST	
HARDWARE													
1. LOAD ASSEMBLE, AND PACK (LAP)	18741997		0.27	5148	2535000	0.30	760	38270093	0.28	10792	27714208	0.29	7979
2. PROPELLANT				122	2535	5.83	15	38271	6.55	251	27715	6.69	185
WC814 (LB)	18742		6.50	329	2598375	0.02	39	39035495	0.02	652	28268493	0.02	483
3. LINK M27	19491677		0.02										
SUBTOTAL				5599			814			11695			8647
PRODUCTION SUPPORT													
1. PRODUCTION ENGINEERING				174			37			1195			884
2. QUALITY ASSURANCE				8			1			29			22
3. ACCEPTANCE TESTING				64			9			134			99
4. INTERIM TRANSPORTATION				21			8			84			62
5. INDUSTRIAL STOCK SUPPORT				233			31			415			307
6. CAWCF GAIN/LOSS SURCHARGE				1024			99						
SUBTOTAL				1524			185			1857			1374

TOTAL P-1 LINE ITEM			0.38	7123		0.39	999		0.35	13552		0.36	10021

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1305-01-258-8694

CTG 5.56MM BLANK M200 LINKED F/SAW

(E01101)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	FEB 96	OCT 96	18741997	0.27			
FY 1997	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	FEB 97	FEB 98	2535000	0.30	YES	NO	
FY 1998	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 97	OCT 98	38270093	0.28	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	27714208	0.29			
2. PROPELLANT WC814 (LB) **										
FY 1996	OLIN ST. MARKS, FL	SS/FP	IOC	APR 96	SEP 96	18742	6.50			
FY 1997	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	2535	5.83	YES	NO	
FY 1998	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 98	SEP 98	38271	6.55	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	27715	6.69			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 1 PAGE NO. 21 of 48

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-01-258-8694

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BLANK M200 LINKED F/SAW (E01101)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. LINK M27										
FY 1996	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	APR 96	AUG 96	19491677	0.02			
FY 1997 TBS		C/FP	IOC	MAR 97	JUL 97	2598375	0.02	YES	NO	
FY 1998 TBS		C/FP	IOC	JAN 98	JUL 98	39035495	0.02	YES	NO	
FY 1999 TBS		C/FP	IOC	JAN 99	JUL 99	28268493	0.02			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 1

PAGE NO. 22 of 48

EXHIBIT P-5A

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM TRACER M856 F/M16A2

(E04602)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	1491	-0-	6658	7830	7947	5456	5522/55579	
COST (In Millions)	\$.9	\$ -0-	\$ 3.5	\$ 4.2	\$ 4.4	\$ 3.1	\$ 3.2/3.3	

DESCRIPTION:

The M856 tracer round has a longer tracer column and an improved pyrotechnic mixture, which results in an increased daylight trace range compared to the 5.56mm M196 tracer round. This cartridge can be identified by an orange bullet tip and is intended to permit visible observation of the bullet's in-flight path or trajectory to the point of impact. This item is used in the M16A2 rifle. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. FY 98/99 procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1982

RCS: DD-COMP(AR)-1092

PCN:P02QMIDOC4Z

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

APPROPRIATION BUDGET ACTIVITY DATE: FEBRUARY 1997
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION P-1 ITEM NOMENCLATURE: NSN = 1305-01-155-5457
 CTG 5.56MM TRACER M856 F/M16A2 (E04602)

		FY 96	(QTY	FY 97	(QTY	FY 98	(QTY	FY 99	(QTY		
ELEMENT OF COST		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	
QM: EACH			COST			COST			COST		
HARDWARE											
1. LOAD ASSEMBLY,	1491000	0.41	614								
2. BOX METAL M2A1	1939	5.62	11								
3. PROPELLANT											
WC844T (LB)	6039	6.50	39								
SUBTOTAL			664								
PRODUCTION SUPPORT											
1. PRODUCTION ENGINEERING			21								
2. QUALITY ASSURANCE			1								
3. ACCEPTANCE TESTING			8								
4. INTERIM TRANSPORTATION			3								
5. INDUSTRIAL STOCK SUPPORT			32								
6. CAWCF GAIN/LOSS SURCHARGE			121								
SUBTOTAL			186								
TOTAL P-1 LINE ITEM			0.57	850		0.53	3538		0.54	4248	

PCN P02QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-01-155-5457

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM TRACER M856 F/M16A2 (E04602)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	FEB 96	OCT 96	1491000	0.41			
FY 1998	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 97	OCT 98	6657732	0.43	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	7829894	0.43			
2. BOX METAL M2A1										
FY 1996	BROCKWAY STANDARD HOMERVILLE, GA	C/FP	IOC	JUN 96	OCT 96	1939	5.62			
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	8323	5.74	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	9788	5.86			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 1

PAGE NO. 29 of 48

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-01-155-5457

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM TRACER M856 F/M16A2 (E04602)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL.
3. PROPELLANT WC844T (LB) **										
FY 1996	OLIN ST. MARKS, FL	SS/FP	IOC	APR 96	SEP 96	6039	6.50			
FY 1998	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 98	SEP 98	26631	6.55	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	31320	6.69			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 1

PAGE NO. 30 of 48

EXHIBIT P-5A

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 2.

CTG 5.56MM BALL M855 LINKED F/SAW

(E04603)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	7550	-0-	9801	8174	8447	8506	8591/8583	
COST (In Millions)	\$ 4.3	\$ -0-	\$ 4.4	\$ 3.7	\$ 3.9	\$ 4.1	\$ 4.2/4.3	

DESCRIPTION:

The Squad Automatic Weapon (SAW) ball round, M855, has a steel, conical insert in the ogive of the bullet. This round will be linked in 200 round belts using the M27 link. This item is Code A, approved for service use. This item will be procured at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. This round is used primarily for training in areas where a fire hazard exists if the tracer round were to be used. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1982

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM11DCV415

APPROPRIATION BUDGET ACTIVITY
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
 P-1 ITEM NOMENCLATURE:
 CTG 5.56MM BALL M855 LINKED F/SAW

DATE: FEBRUARY 1997
 NSN = 1305 01 258 8692
 (E04603)

		FY 96	(QTY	FY 97	(QTY	FY 98	(QTY	FY 99	(QTY	8173602)
ELEMENT OF COST		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
QM: EACH			COST			COST			COST	
HARDWARE										
1. LOAD, ASSEMBLE, AND PACK (LAP)	7550000	0.40	3039					8173602	0.35	2857
2. PROPELLANT	30200	6.42	194					32695	6.69	219
3. LINK M27	7738750	0.02	128					8337075	0.02	143
SUBTOTAL			3361				3779			3219
PRODUCTION SUPPORT										
1. PRODUCTION ENGINEERING			104				386			329
2. QUALITY ASSURANCE			5				9			8
3. ACCEPTANCE TESTING			39				43			37
4. INTERIM TRANSPORTATION			13				27			23
5. INDUSTRIAL STOCK SUPPORT			168				135			113
6. CAWCF GAIN/LOSS SURCHARGE			614							
SUBTOTAL			943				600			510
TOTAL P-1 LINE ITEM			0.57	4304			0.45	4379	0.46	3729

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-258-8692

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BALL M855 LINKED F/SAW

(FO4603)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	JUN 96	OCT 96	7550000	0.40			
FY 1998	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 97	OCT 98	9801422	0.34	YES		NO
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	8173602	0.35			
2. PROPELLANT WC844 (LB) **										
FY 1996	OLIN ST. MARKS, FL	SS/FP	IOC	SEP 96	SEP 96	30200	6.42			
FY 1998	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 98	SEP 98	39206	6.55	YES		NO
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	32695	6.69			

REMARKS:

** PACING COMPONENT

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-01-258-8692

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM BALL M855 LINKED F/SAW

(F04603)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. LINK M27										
FY 1996	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	SEP 96	SEP 96	7738750	0.02			
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	9997451	0.02	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	8337075	0.02			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 1 PAGE NO. 36 of 48

EXHIBIT P-5A

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE														
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG 5.56MM 4 BALL M855/1 TRACER M856 F/SAW (E04604)														
	FY	96	FY	97	FY	98	FY	99	FY	00	FY	01	FY	02	FY	03
QUANTITY (Thousands)		-0-		17521		-0-		22007		24526		22867		22963/23032		
COST (In Millions)	\$	.7	\$	9.1	\$	-0-	\$	11.0	\$	12.5	\$	11.9	\$	12.2/12.6		

DESCRIPTION:

The M855 ball and M856 tracer rounds are linked for use in the lightweight, one-man operable M249 Squad Automatic Weapon (SAW). The ball round has a steel, conical insert in the ogive of the bullet, which increases helmet penetration substantially compared to the 5.56mm, M193 ball round. The tracer round M856 has a longer tracer column and an improved pyrotechnic mixture, which results in an increased daylight trace range compared to the 5.56mm M196 tracer round. The rounds are linked in a 200 round belt using the M27 link and are loaded into a plastic container which attaches directly to the M249 SAW. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. FY 99 procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1982

RCS: DD-COMP(AR)-1092

PCN:PO2QM1DOC4Z

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

APPROPRIATION BUDGET ACTIVITY
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:
 CTG 5.56MM 4 BALL M855/1 TRACER M856 F/SAW

DATE: FEBRUARY 1997
 NSN = 1305-01-252-0153
 (E04604)

		FY 96	(QTY	)	FY 97	(QTY	)	FY 98	(QTY	)	FY 99	(QTY	)	22007313)
ELEMENT OF COST	QTY	UNIT	TOTAL	TOTAL	QTY	UNIT	TOTAL	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
QM: EACH		COST				COST				COST			COST	
HARDWARE														
1. LOAD, ASSEMBLE, AND PACK (LAP)	17521000	0.40	7066									22007313	0.39	8490
2. PROPELLANT WC844T (LB)	14017	5.83	82									17606	6.69	118
3. PROPELLANT WC844 (LB)	57820	5.83	337									70424	6.69	471
4. LINK M27	17959025	0.02	269									22447460	0.02	384
SUBTOTAL			7754											9463
PRODUCTION SUPPORT														
1. PRODUCTION ENGINEERING			284											967
2. QUALITY ASSURANCE			11											24
3. ACCEPTANCE TESTING			85											109
4. INTERIM TRANSPORTATION			74											68
5. CAWCF GAIN/LOSS SURCHARGE			903											335
6. INDUSTRIAL STOCK SUPPORT														
SUBTOTAL			1357											1503
NONRECURRING														
1. MATERIEL CHANGE			700											
SUBTOTAL			700											
TOTAL P-1 LINE ITEM														
			0.52	9111									0.50	10966

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-252-0153

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 5.56MM 4 BALL M855/1 TRACER M856 F/SAW

(E04604)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1995	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	DEC 94	FEB 96	18448735	.37			
FY 1997	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	JAN 97	OCT 97	17521000	0.40	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	22007313	0.39			
2. PROPELLANT WC844T (LB) **										
FY 1995	OLIN ST. MARKS, FL	SS/FP	IOC	JUN 95	JAN 96	14759	6.28			
FY 1997	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	14017	5.83	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	17606	6.69			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 1 PAGE NO. 43 of 48

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1305-01-252-0153

CTG 5.56MM 4 BALL M855/1 TRACER M856 F/SAW (E04604)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. PROPELLANT WC844 (LB)										
FY 1995	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 95	JAN 96	60881	6.28			
FY 1997	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	57820	5.83	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	70424	6.69			
4. LINK M27										
FY 1995	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	DEC 94	JUL 95	19186685	0.02			
FY 1997	TBS	C/FP	IOC	MAR 97	JUL 97	17959025	0.02	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	22447460	0.02			

REMARKS:

TBS - To Be Selected

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS	CONTROL	SYMBOL
DD-COMP (AR)	1092	

APPROPRIATION/BUDGET ACTIVITY**APPROPRIATION/BUDGET ACTIVITY**

P-1 ITEM NOMENCLATURE

1

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO COMPLETE AFTER D-DAY	
		MINIMUM SUST.	MAXIMUM		
1	LAKE CITY AAP IND MO.	0.00	11.50	39.30	0
2	OLIN ST. MARKS FL.	0.70	0.83	1.00	0

	PROCUREMENT LEAD TIME			
	ADMIN LEADTIME		PROD.	TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT		
INITIAL	6	2	11	13
REORDER	6	2	11	13

REMARKS PACKING	COMPONENT (U/M=K/LB)				TOTAL
	UALT	ALT	PLT		
INITIAL	6	11	1		12
REORDER	6	11	1		12

QUANTITY IN MILLIONS

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1092

APPROPRIATION/BUDGET ACTIVITY

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

P-1 ITEM NOMENCLATURE

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REACH MO. AFTER BIDDING
		MINIMUM 1-8-5	MAXIMUM	
1	LAKE CITY AAP IND MO.	0.00	11.50	39.30
2	OLIN ST. MARKS FL.	0.70	0.83	1.00

	PROCUREMENT LEAD TIME		TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT	
INITIAL	6	2	13
REORDER	6	2	13

REMARKS
PACING COMPONENT (U/M=K/LB)

	UALT	ALT	PLT	TOTAL
INITIAL	6	11	1	12
REORDER	6	11	1	12

QUANTITY IN MILLIONS

BUDGET ITEM JUSTIFICATION RECORD

DATE:

February 1997

APPROPRIATION/BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:

M995 CTG 5.56mm ARMOR PIERCING

(F47600)

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	996	1438	1406	1375	1344	1344	1344	1344
COST (IN MILLIONS)	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0

DESCRIPTION: The M995 5.56mm Armor Piercing cartridge is designed for use in the M249 SAW Machine Gun, the M16A2 Rifle and the M4 Carbine. The cartridge consists of a projectile and a propelling charge contained in a brass cartridge case to which the projectile is secured. The projectile consists of a dense metal penetrator (tungsten carbide) which is enclosed by a standard gilding metal jacket. An aluminum cup sits at the rear of the projectile for the purpose of properly locating the penetrator within the projectile. The penetrator is similar to components used in other small caliber cartridges currently used by the US Army, but tungsten has better penetration capabilities than the other materials and is the design feature which enhances the armor piercing capability of the cartridge. The cartridge utilizes a conventional brass case and double base propellant. A standard rifle cartridge primer is used in the case to initiate the propelling charge. This item is code "A" approved SMCA and will be procured as actual cost in FY98.

JUSTIFICATION:

The FY98/FY99 procurements are intended for use against current and future light armored targets. The M995 5.56mm Armor Piercing cartridge offers the capability to defeat these targets at ranges 2 to 3 times that of currently available ammunition. The FY98 & FY99 buy builds a war inventory in accordance with the Army's procurement goals.

Acquisition Manager: Product Manager Small Arms

WEAPON SYSTEM COST ANALYSIS											
EXHIBIT (P-5)			A. Appropriation/Budget Activity Title/No. Procurement Ammunition, Army/Activity 1.		B. WEAPON MODEL/SERIES M995 CTG 5.56mm Armor Piercing (F47600)		C. MANUFACTURER NAME BOFORS/LAKE CITY ARMY AMMUNITION PLANT		D. DATE February 1997		
Weapon System Cost Elements			Ident. code	FY96 Unit Cost	1,056,250 Total Cost	FY97 Unit Cost	1,437,500 Total Cost	FY98 Unit Cost	1,406,250 Total Cost	FY99 Unit Cost	1,375,000 Total Cost
<u>HARDWARE</u>											
1. M995 5.56mm ARMOR PIERCING				1.18	997	1.24	1427	1.27	1428	1.30	1426
2. M27 LINKS				0.02	22	0.02	31	0.02	31	0.02	31
3. M856 5.56mm TRACER				0.37	77	0.39	112	0.40	112	0.41	112
4. Propellant				0.03	6	0.03	9	0.03	9	0.03	9
5. LOAD, PACK & ASSEMBLY				0.16	169	0.17	242	0.17	242	0.18	342
SUBTOTAL				1.76	1271	1.85	1821	1.89	1822	1.93	1820
<u>PRODUCTION SUPPORT</u>											
1. PRODUCTION ENGINEERING					351		152		131		137
2. QUALITY ASSURANCE					28		25		23		22
SUBTOTAL					379		177		154		159
<u>NONRECURRING COST</u>											
1. LIVE FIRE TESTING					20						
2. INITIAL PRODUCTION TEST					275						
SUBTOTAL											
TOTAL				2.39	1945	1.39	1998	1.41	1976	1.44	1979

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

B. APPROPRIATION/BUDGET ACTIVITY									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION									
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D
C. P-1 ITEM NOMENCLATURE									
M995 CTG 5.56mm ARMOR PIERCING (F47600)									
Load, Assemble & Pack									
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 96	Jun 97	825,000	0.16		
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Jun 98	231,250	0.16		
FY97	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Jun 98	1,437,500	0.17		
FY98	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jan 98	Aug 98	1,406,250	0.17		
FY99	Lake City Army Ammunition Plant	SS/CPAF	IOC	Oct 98	Apr 99	1,375,000	0.18		
M995 CTG 5.56mm Armor Piercing									
FY96	BOFORS, Sweden	SS/FFP	ARDEC	Mar 96	Apr 97	660,000	1.18	Yes	Jan 96
FY96	BOFORS, Sweden	SS/FFP	ARDEC	Jun 97	Mar 98	185,000	1.18		
FY97	BOFORS, Sweden	SS/FFP	ARDEC	Jun 97	Mar 98	1,150,000	1.24		
FY98	BOFORS, Sweden	SS/FFP	ARDEC	Jan 98	Jul 98	1,125,000	1.27		
FY99	BOFORS, Sweden	SS/FFP	ARDEC	Jan 99	Jul 99	1,100,000	1.30		
M27 Links									
FY96	IOC	C/FP	IOC	Sep 96	Oct 96	841,500	0.02	Yes	Jan 96
FY96	IOC	C/FP	IOC	Jun 97	Dec 97	235,875	0.02		
FY97	IOC	C/FP	IOC	Jun 97	Dec 97	1,466,250	0.02		
FY98	IOC	C/FP	IOC	Jan 98	Jul 98	1,434,375	0.02		
FY99	IOC	C/FP	IOC	Jan 99	Mar 99	1,402,500	0.02		
M856 5.56mm Tracer									
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 96	Oct 96	165,000	0.37	Yes	Jan 96
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Dec 97	46,250	0.37		
FY97	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Dec 97	287,500	0.39		
FY98	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jan 98	Jul 98	281,250	0.40		
FY99	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jan 98	Oct 99	275,000	0.41		
D. REMARKS									

A. DATE

February 1997

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE					
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 2.		CTG 7.62MM ALL TYPES (E02000)					
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 9.3	\$ 8.0	\$ 3.1	\$ 23.6	\$ 36.8	\$ 43.8	\$ 43.2/44.5

DESCRIPTION:

This budget line includes 7.62MM ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, 7.62MM, ALL TYPES (E02000)									
DATE FEBRUARY 1997									
SSN/ITEM:	96		97		98		99		TOTAL
	FY	QTY	UNIT COST	TOTAL	FY	QTY	UNIT COST	TOTAL	
(E01902) CTG 7.62MM BLANK M82 LINKED/ M13	0	0	0.00	0	928	0	0.53	488	25356
(E02002) CTG 7.62MM 4 BALL/1 TRACER LINKED	0	0	0.00	0	4586	0	0.60	2760	0
(E02003) CTG 7.62MM BALL M80 LINKED/M13	9476	0	0.57	5361	5692	0	0.56	3205	0
(E02006) CTG 7.62MM 4 BALL/1 TRACER F/MINIGUN	0	0	0.00	0	0	0	0.00	0	0
(E02007) CTG 7.62MM 4 BALL/1 TRACER F/OHF	0	0	0.00	0	0	1013	0.64	648	1795
(E02201) CTG 7.62MM SPEC BALL M118	0	0	0.00	0	0	0	0.00	0	676
TOTAL P-1 LINE ITEM				5361				1136	
									21656

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 7.62MM BLANK M82 LINKED/M13

(E01902)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	-0-	928	25356	25377	25403	25380/25333	
COST (In Millions)	\$ -0-	\$ -0-	\$.5	\$ 13.6	\$ 13.9	\$ 14.2	\$ 14.6/14.9	

DESCRIPTION:

This cartridge consists of a primer and propellant contained in a brass case shaped to conform to the configuration of the service round. The propellant is held in by a wad. The mouth of the cartridge is sealed and crimped. The Blank Firing Attachment (BFA) M21 is installed on the M240 Machine Gun to enable blank ammunition to be fired and to provide back pressure to sustain continuous firing. This item is Code A, approved for service use. This item will be procured at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1958

RCS: DD-COMP (AR) -1092

PCN:P02QM1DOC4Z

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

DATE: FEBRUARY 1997
 NSN = 1305-01-181-1750
 (E01902)

APPROPRIATION BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE:
 CTG 7.62MM BLANK M82 LINKED/M13

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ELEMENT OF COST QM: EACH	FY 96 (QTY)		FY 97 (QTY)		FY 98 (QTY)		FY 99 (QTY)		25355821)	
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	TOTAL
HARDWARE										
1. LOAD, ASSEMBLE, AND PACK (LAP)							928453	0.41	384	25355821
2. LINK M13							947023	0.02	20	25862938
3. PROPELLANT WC818 (LB)							2600	6.55	17	70997
SUBTOTAL									421	11744
PRODUCTION SUPPORT										
1. PRODUCTION ENGINEERING									43	1200
2. QUALITY ASSURANCE									1	29
3. ACCEPTANCE TESTING									5	135
4. INTERIM TRANSPORTATION									3	85
5. INDUSTRIAL STOCK SUPPORT									15	416
SUBTOTAL									67	1865

TOTAL P-1 LINE ITEM								0.53	488	*****
									0.54	13609

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1305-01-181-1750

CTG 7.62MM BLANK M82 LINKED/M13

(E01902)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1994	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 93	OCT 94	24192800	.28			
FY 1998	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 97	OCT 98	928453	0.41	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	25355821	0.42			
2. LINK M13										
FY 1994	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	JAN 94	JUL 94	24676656	.02			
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	947023	0.02	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	25862938	0.02			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 3

PAGE NO.

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EXHIBIT P-5A

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1305-01-181-1750

CTG 7.62MM BLANK M82 LINKED/M13

(E01902)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. PROPELLANT WC818 (LB) **										
FY 1994	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 94	SEP 94	55644	5.98			
FY 1998	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 98	SEP 98	2600	6.55	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	70997	6.69			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 3

PAGE NO.

6 of 27

EXHIBIT P-5A

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 7.62MM 4 BALL/1 TRACER LINKED

(E02002)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	4586	-0-	-0-	19770	25830	22916	23219
COST (In Millions)	\$ -0-	\$ 2.8	\$ -0-	\$ -0-	\$ 12.4	\$ 16.5	\$ 15.0	\$ 15.6

DESCRIPTION:

This item consists of ball and tracer rounds linked four to one and is used in Machine Guns Series M60 and M240. It is intended for use against personnel and non-armor targets. This item is Code A, approved for service use. This item will be procured through the CAMCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. Procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1957

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1DOC42

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305 00-892-2150
(F02002)

P-1 ITEM NOMENCLATURE:

CTG 7.62MM 4 BALL/1 TRACER LINKED

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

		FY 96		FY 97		FY 98		FY 99			
		QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	TOTAL
ELEMENT OF COST		QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	TOTAL
QM: EACH		QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	TOTAL
HARDWARE											
1. LOAD ASSEMBLY, AND PACK (LAP)					4585895	0.45	2064				
2. LINK M13					4677613	0.02	87				
3. PROPELLANT											
WC846 (LB)					25682	5.83	150				
4. PROPELLANT											
WC846T (LB)					6421	5.83	37				
SUBTOTAL							2338				
PRODUCTION SUPPORT											
1. PRODUCTION ENGINEERING							98				
2. QUALITY ASSURANCE							3				
3. ACCEPTANCE TESTING							25				
4. INTERIM TRANSPORTATION							22				
5. CAWCF GAIN/LOSS SURCHARGE							274				
SUBTOTAL							422				

TOTAL P-1 LINE ITEM						0.60	2760				

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-00-892-2150

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 7.62MM 4 BALL/1 TRACER LINKED (E02002)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1990	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 89	OCT 90	97700000	0.21			
FY 1997	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	FEB 97	OCT 97	4585895	0.45	YES	NO	
2. LINK M13										
FY 1990	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	JAN 90	JUL 90	99654000	0.02			
FY 1997	TBS	C/FP	IOC	MAR 97	JUL 97	4677613	0.02	YES	NO	
3. PROPELLANT WC846 (LB)										
FY 1990	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 90	SEP 90	548658	5.15			
FY 1997	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	25682	5.83	YES	NO	

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 3

PAGE NO. 13 of 27

EXHIBIT P-5A

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1305-00-892-2150

CTG 7.62MM 4 BALL/1 TRACER LINKED

(E02002)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
4. PROPELLANT WC846T (LB) **										
FY 1990	OLIN	SS/FP	IOC	AUG 90	SEP 90	136780	5.15			
FY 1997	ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	6421	5.83	YES	NO	
	ST. MARKS, FL									

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 3

PAGE NO. 14 of 27

EXHIBIT P-5A

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL,
DD FORM 100, 1-60**APPROPRIATION/BUDGET ACTIVITY**

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
PROCUREMENT ASSISTANT	

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 7.62MM 4 BALL/1 TRACER LINKED

FISCAL YEAR	FISCAL YEAR	CIS 1:02MM 4
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FISCAL YEAR

E02002

FAC NO.	U M R V	E	PROGRAM QTY	00												01												02												L A T E R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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				FY 96P	FY 97	FY 98	FY 99	FY 99	AS OF 1 OCT	ACCEP. PRIOR TO 1 OCT	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR		MAY	JUN	JUL	AUG	SEP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REACH MAX AFTER D-DAY
		MINIMUM SUST.	1-8-5 MAXIMUM	
1	LAKE CITY AAP IND MO	0.00	13.84	47.79
2	OLIN, ST. MARKS, FL	0.70	0.83	1.00

PROCUREMENT LEAD TIME				
	ADMIN LEADTIME		PROD.	TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT		
INITIAL	6	2	11	13
REORDER	6	2	11	13

MARKS FACING	COMPONENT (U/M = K/LB)			TOTAL	QUANTITY IN MILLIONS
	UALT	ALT	PLT		
INITIAL	6	11	1	12	
REORDER	6	11	1	12	

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1092**APPROPRIATION/BUDGET ACTIVITY**

P-1 ITEM NOMENCLATURE

P-1 ITEM NOMENCLATURE
CTG 7.62MM 4 BALL/1 TRACER LINKED

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 7.62MM 4 BALL/1 TRACER LINKED

FISCAL YEAR

FISCAL YEAR

FISCAL YEAR

E02002

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REPLACE AFTER D-DAY
		MINIMUM SUST.	MAXIMUM	
1	LAKE CITY AAP IND MO	0.00	13.84	5
2	OLIN, ST. MARKS, FL	0.70	0.83	0

	PROCUREMENT LEAD TIME		
	ADMIN LEADTIME		
	PRIOR 1 OCT	AFTER 1 OCT	PROD. 1 OCT
INITIAL	6	2	11
REORDER	6	2	11
			TOTAL AFTER 1 OCT
			13
			13

REMARKS
PACING COMPONENT (U/M = K/LB)

	UALT	ALT	PLT	TOTAL
INITIAL	6	11	1	12
REORDER	6	11	1	12

QUANTITY IN MILLIONS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG 7.62MM BALL M80 LINKED/M13

(E02003)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	9475	5692	-0-	11122	11131	11191	11302	111297
COST (In Millions)	\$ 5.4	\$ 3.2	\$ -0-	\$ 6.4	\$ 6.5	\$ 6.7	\$ 6.9	\$ 7.1

DESCRIPTION:

This cartridge is for use in the Machine Gun Series M60, M73, M219, and M240. The straight ball M80 configuration is used in support of training. The bullet consists of a gilding-metal steel jacket with a lead-antimony slug. The cartridge case is brass and the bullet is unpainted. This item is Code A, approved for service use. This item will be procured through the CAMCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1979

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QMIDOC4Z

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305-00-892-2330
(E02003)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:
CTG 7.62MM BALL M80 LINKED/M13

ELEMENT OF COST QM: EACH	FY 96		FY 97		FY 98		FY 99		UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
	QTY	UNIT COST	QTY	UNIT COST	QTY	UNIT COST	QTY	UNIT COST					
HARDWARE													
1. LOAD ASSEMBLY, AND PACK (LAP)	8929600	0.42								3735			
2. PROPELLANT WC846 (LB)	61615	5.83								359			
3. LINK M13	9108192	0.02								170			
SUBTOTAL										4264			
PRODUCTION SUPPORT													
1. PRODUCTION ENGINEERING										148			
2. QUALITY ASSURANCE										6			
3. ACCEPTANCE TESTING										46			
4. INTERIM TRANSPORTATION										41			
5. CAWCF GAIN/LOSS SURCHARGE										496			
SUBTOTAL										737			
*****										*****			
TOTAL P-1 LINE ITEM!		0.56		5001						*****			

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QMIDOC4Z

APPROPRIATION BUDGET ACTIVITY
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
 P-1 ITEM NOMENCLATURE:
 CTG 7.62MM BALL M80 LINKED/M13

DATE: FEBRUARY 1997
 NSN = 1305-00-892-2330
 (EO2003)

FY 96 (QTY		545600)	FY 97 (QTY	5691885)	FY 98 (QTY	FY 99 (QTY	11122054)		
ELEMENT OF COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
QM: EACH									
HARDWARE									
1. LOAD ASSEMBLY, AND PACK (LAP)	545600	0.45	247	5691885	0.42	2381	11122054	0.43	4754
2. PROPELLANT WC846 (LB)	3765	6.50	24	39275	5.83	229	76743	6.69	513
3. LINK M13	556512	0.02	12	5805723	0.02	109	11344496	0.02	247
SUBTOTAL			283			2719			5514
PRODUCTION SUPPORT									
1. PRODUCTION ENGINEERING			9			108			564
2. QUALITY ASSURANCE			3			4			14
3. ACCEPTANCE TESTING			1			30			63
4. INTERIM TRANSPORTATION			12			26			40
5. INDUSTRIAL STOCK SUPPORT			52			318			195
6. CAWCF GAIN/LOSS SURCHARGE			77			486			876
SUBTOTAL			360			3205			6390
TOTAL P-1 LINE ITEM		0.66			0.56			0.57	

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1305-00-892-2330

CTG 7.62MM BALL M80 LINKED/M13

(E02003)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	OCT 96	APR 97	8929600	.42			
FY 1996	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	FEB 96	APR 97	545600	0.45			
FY 1997	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 96	OCT 97	5691885	0.42	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	11122054	0.43			
2. PROPELLANT WC846 (LB) **										
FY 1996	OLIN ST. MARKS, FL	SS/FP	IOC	JAN 97	MAR 97	61615	6.50			
FY 1996	OLIN ST. MARKS, FL	SS/FP	IOC	SEP 96	JAN 97	3765	5.83			
FY 1997	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	39275	5.83	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	76743	6.69			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 3

PAGE NO. 22 of 27

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-00-892-2330

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 7.62MM BALL M80 LINKED/M13

(E02003)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. LINK M13										
FY 1996	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	OCT 96	MAR 97	9108192	0.02			
FY 1996	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	JUL 96	MAR 97	556512	0.02			
FY 1997	TBS	C/FP	IOC	MAR 97	MAY 97	5805723	0.02	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	11344496	0.02			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 3

PAGE NO. 23 of 27

EXHIBIT P-5A

PRODUCTION SCHEDULE (EXHIBIT P-21)																											DATE		FEBRUARY 1997		REQUIREMENTS CONTROL SYMBOL	
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE										DD-COMP (AR) 1092												
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										CTG 7.62MM BALL M80 LINKED/M13										E02003												
FISCAL YEAR										FISCAL YEAR										FISCAL YEAR												
97										98										99												
CALENDAR YEAR										CALENDAR YEAR										CALENDAR YEAR												
96										97										98												
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP										OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP										OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP												
FAC NO.										S E R V										U M										L A T E R		
PROGRAM QTY										ACCEP. BAL PRIOR TO 1 OCT										FY FY												

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES	MONTHS TO REACH MAX AFTER D-DAY
1	LAKE CITY AAP IND MO	0.00 11.08 38.24	0
2	OLIN, ST MARKS, FL	0.70 0.83 1.00	0

PROCUREMENT LEAD TIME			
PRIOR 1 OCT	AFTER 1 OCT	PROD.	TOTAL AFTER 1 OCT
INITIAL	6	2	11
REORDER	6	2	11

PACKING COMPONENT (U/M = K/LB)			
INITIAL	U/LT	ALT	PLT
REORDER	6	11	1
	6	11	1

QUANTITY IN MILLIONS

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1042

APPROPRIATION/BUDGET ACTIVITY

P-1 TTFM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ITEM NOMENCLATURE
CTC 7 62MM BALL MOD INTENDED/M13

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[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REPLACE AFTER D-DAY
		MINIMUM SUST.	MAXIMUM	
1	LAKE CITY AAP IND MO	0.00	11.08	38.24
2	OLIN, ST MARKS, FL	0.70	0.83	1.00

	PROCUREMENT LEAD TIME		TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT	
INITIAL	6	2	11
REORDER	6	2	11

REMARKS
PACING COMPONENT (U/M = K/LB)

	UALT	ALT	PLT	TOTAL
INITIAL	6	11	1	12
REORDER	6	11	1	12

QUANTITY IN MILLIONS

BUDGET ITEM JUSTIFICATION RECORD

DATE:

February 1997

APPROPRIATION/BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:

M993 CTG 7.62mm Armor Piercing

F47500

	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	1670	1031	1013	981	0	0	0	0
COST (IN MILLIONS)	3.9	2.0	2.0	2.0	0	0	0	0

DESCRIPTION: The M993 7.62mm Armor Piercing (AP) Round is currently produced by Bofors Carl Gustaf AB of Sweden. The projectile assembly consists of a tungsten core penetrator contained in an aluminum cup and jacketed by tombac (similar to standard gilding metal, 90% copper, 10% zinc) clad steel. The shaped tungsten core provides enhanced armor penetration, representing a key departure from the current 7.62mm ball service round. The Bofors CGAB produced cartridge utilizes a conventional brass cartridge case with a Berdan primer. The propellant is a single base type manufactured by Bofors and the primer is manufactured by Dynamit Noble. Upon firing, the projectile assembly is propelled from the muzzle of the weapon and travels to the target. Total cartridge weight is 362.6 grains (23.5 grams). Current 7.62mm ammunition is capable of penetrating 1/4" armor plate at a distance of not greater than 100 meters. The M993 7.62mm AP Round is capable of penetrating a 7mm thick high hardness armor (HHA) plate at a distance of 500 meters from the muzzle of the weapon. This corresponds to 1/4" armor plate at a distance of 550m. This item is code "A" approved SMCA and will be procured as actual cost in FY98.

JUSTIFICATION:

The FY98 and FY99 procurements are intended for use against current and future light armored targets. The M993 offers the capability to defeat these targets at ranges 2 to 3 times that of currently available ammunition. The FY98 and FY99 quantities build a war inventory in accordance with the Army's procurement goals.

Acquisition Manager: Product Manager Small Arms

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5)

WEAPON SYSTEM COST ANALYSIS										
EXHIBIT (P-5)		A. Appropriation/Budget Activity Title/No. Procurement Ammunition, Army/Activity 1.		B. WEAPON MODEL/SERIES POPULAR NAME M993 CTG 7.62mm Armor Piercing		C. MANUFACTURER NAME BOFORS/LAKE CITY ARMY AMMUNITION PLANT		D. DATE February 1997		
Weapon System Cost Elements		Ident. code	FY96 Unit Cost	1,670,000 Total Cost	FY97 Unit Cost	1,031,250 Total Cost	FY98 Unit Cost	1,012,500 Total Cost	FY99 Unit Cost	981,250 Total Cost
<u>HARDWARE</u>										
1. M993 7.62mm ARMOR PIERCING			1.82	2561	1.86	1536	1.90	1543	1.94	1527
2. M13 LINKS			0.03	54	0.03	29	0.03	29	0.03	29
3. M62 7.62mm TRACER			0.40	140	0.42	87	0.43	87	0.44	86
4. LOAD, ASSEMBLE & PACK			0.17	298	0.18	184	0.18	185	0.19	183
SUBTOTAL			2.42	3053	2.49	1836	2.54	1844	2.60	1825
<u>PRODUCTION SUPPORT</u>										
1. PRODUCTION ENGINEERING				383		137		125		129
2. QUALITY ASSURANCE				40		25		25		25
SUBTOTAL				423		162		150		154
<u>NONRECURRING COST</u>										
1. LIVE FIRE TESTING				20						
2. INITIAL PRODUCTION TEST				447						
SUBTOTAL				467						
TOTAL			2.36	3943	1.94	1998	1.97	1994	2.02	1979

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

B. APPROPRIATION/BUDGET ACTIVITY										A. DATE	
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										February 1997	
C. P-1 ITEM NOMENCLATURE										F47500	
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQD	IF YES, WHEN AVAILABLE	
Load, Assemble & Pack											
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	May 96	Jul 96	600,000	0.17				
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Feb 98	1,150,000	0.17				
FY97	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Feb 98	1,031,250	0.18				
FY98	Lake City Army Ammunition Plant	SS/CPAF	IOC	Nov 97	Aug 98	1,012,500	0.18				
FY99	Lake City Army Ammunition Plant	SS/CPAF	IOC	Nov 98	Apr 99	981,250	0.19				
M993 7.62mm Armour Piercing											
FY96	BOFORS, Sweden	SS/FFP	ARDEC	Mar 96	Jul 96	480,000	1.77	Yes		Jan 96	
FY96	BOFORS, Sweden	SS/FFP	ARDEC	Jun 97	Jan 98	920,000	1.86				
FY97	BOFORS, Sweden	SS/FFP	ARDEC	Jun 97	Jan 98	825,000	1.86				
FY98	BOFORS, Sweden	SS/FFP	ARDEC	Oct 97	Jul 98	810,000	1.90				
FY99	BOFORS, Sweden	SS/FFP	ARDEC	Oct 98	Mar 99	785,000	1.94				
M13 Links											
FY96	IOC	C/FP*	IOC	Jun 96	Jun 96	612,000	0.03	Yes		Jan 96	
FY96	IOC	C/FP	IOC	Jun 97	Jan 98	1,173,000	0.03				
FY97	IOC	C/FP	IOC	Jun 97	Jan 98	1,051,875	0.03				
FY98	IOC	C/FP	IOC	Oct 97	Jul 98	1,032,750	0.03				
FY99	IOC	C/FP	IOC	Oct 98	Mar 99	1,000,875	0.03				
M62 7.62mm Tracer											
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	May 96	Jul 96	120,000	0.40	Yes		Jan 96	
FY96	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Jan 98	230,000	0.40				
FY97	Lake City Army Ammunition Plant	SS/CPAF	IOC	Jun 97	Jan 98	206,250	0.42				
FY98	Lake City Army Ammunition Plant	SS/CPAF	IOC	Oct 97	Aug 98	202,500	0.43				
FY99	Lake City Army Ammunition Plant	SS/CPAF	IOC	Oct 98	Apr 99	196,250	0.44				
D. REMARKS											

DD Form 2446-1, JUL 87

ITEM NO.

Previous editions are obsolete

Exhibit P-5A Procurement History and Planning
Page 3 of 5 Pages

FY 96/97 BUDGET PRODUCTION SCHEDULE										P-1 ITEM NOMENCLATURE										Date	
										CTG 7.62mm ARMOR PIERCING										February 1997	
										F47500											
										FISCAL YEAR 97										FISCAL YEAR 98	
										CALENDAR YEAR 97										CALENDAR YEAR 98	
										JANUARY 97										JANUARY 98	
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BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 9MM ALL TYPES

(EA3000)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 4.6	\$ 1.0	\$ 4.2	\$ 2.7	\$ 2.8	\$ 2.9	\$ 3.0	\$ 3.1

DESCRIPTION:

This budget line includes 9MM ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, 9MM, ALL TYPES (EA3000)

FEBRUARY 1997

SSN/ITEM:	96			97			98			99		
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
(E05210) CTG 9MM BALL M882	30872	0.15	4580	7858	0.13	999	28169	0.15	4229	17771	0.15	2724
TOTAL P-1 LINE ITEM			4580			999			4229			2724

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG 9MM BALL M882

(E05210)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	30872	7858	28169	17771	18133	18228	18420	18416
COST (In Millions)	\$ 4.6	\$ 1.0	\$ 4.2	\$ 2.7	\$ 2.8	\$ 2.9	\$ 3.0	\$ 3.1

DESCRIPTION:

This round consists of a brass case, a jacketed lead bullet, a two-piece boxer-type primer, and a double base propellant. The cartridge 9mm, ball M882 conforms to all United States requirements and NATO standardization agreement (STANAG) 4090 for 9mm ammunition. Its primary usage is with the M9 personal defense weapon (PDW) and is compatible with all NATO 9mm weapons. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. FY 98/99 procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1985

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QMIDOC4Z

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305-01-172-9558
(E05210)P-1 ITEM NOMENCLATURE:
CTG 9MM BALL M882

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

		FY 96	(QTY	30871992)	FY 97	(QTY	7857921)	FY 98	(QTY	28169307)	FY 99	(QTY	17771048)
ELEMENT OF COST		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
QM: EACH			COST			COST			COST			COST	
HARDWARE													
1.LOAD, ASSEMBLE, AND PACK (LAP)	30871992	0.11	3455	7857921	0.10	773	28169307	0.12	3485	17771048	0.13	2244	
2.BOX METAL M2A1	31490	5.62	177	8016	5.07	41	28733	5.74	165	18127	5.86	106	
SUBTOTAL			3632	814					3650			2350	
PRODUCTION SUPPORT													
1.PRODUCTION ENGINEERING			121	37					373			240	
2.QUALITY ASSURANCE			5	1					9			6	
3.ACCEPTANCE TESTING			42	9					42			27	
4.INTERIM TRANSPORTATION			14	8					26			17	
5.INDUSTRIAL STOCK SUPPORT			102	31					129			84	
6.CAWCF GAIN/LOSS SURCHARGE			664	99									
SUBTOTAL			948	185					579			374	

TOTAL P-1 LINE ITEM!			4580	999		0.13	4229		0.15	2724		0.15	2724

PCN P02QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-172-9558

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 9MM BALL M882

(E05210)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	OLIN CORP	C/FP	IOC	JAN 96	FEB 96	30871992	0.11			
FY 1997	TBS	C/FP	IOC	JAN 97	AUG 97	7857921	0.10	YES	NO	
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	28169307	0.12	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	17771048	0.13			
2. BOX METAL M2A1										
FY 1996	BROCKWAY STANDARD	C/FP	IOC	OCT 95	JAN 96	31490	5.62			
FY 1997	TBS	C/FP	IOC	JAN 97	JUL 97	8016	5.07	YES	NO	
FY 1998	TBS	C/FP	IOC	JAN 98	JUN 98	28733	5.74	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUN 99	18127	5.86			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 5 PAGE NO. 5 of 9

EXHIBIT P-5A

PRODUCTION SCHEDULE (EXHIBIT P-21)										DATE		FEBRUARY 1997		REQUIREMENTS CONTROL SYMBOL																					
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE		DD-COMP (AR) 1092		E05210																					
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										CTG 9MM BALL M882																									
FISCAL YEAR										FISCAL YEAR		FISCAL YEAR		FISCAL YEAR																					
97										98		99		99																					
96										97		98		99																					
ACCEP. PRIOR TO 1 OCT										BAL DUE AS OF 1 OCT		OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP	
PROGRAM QTY										FY		FY		FY		FY		FY		FY		FY		FY		FY		FY		FY		FY		FY	
S E R V										96		97		98		99		99		99		99		99		99		99		99		99		99	
FAC NO.										M		M		M		M		M		M		M		M		M		M		M		M		M	
										0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
1										M		CG		2.50		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		CG		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
2										M		CG		3.10		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
2										M		CG		3.10		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
1										M		OTH		10.3		10.3		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
1										M		OTH		1.10		1.10		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00	
										M		OTH		0.00		0.00		0.00		0.00		0.00		0.00		0.00									

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG .45 CAL ALL TYPES

(ER8110)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ -0-	\$ -0-	\$.1	\$ -0-	\$.1	\$.1	\$	.1/.1

DESCRIPTION:

This budget line includes .45 CAL ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, .45 CAL, ALL TYPES (ER8110)

DATE _____

FEBRUARY 1997

FY 99

SSN/ITEM:	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
(E06300) CTG CAL .45 MATCH GRADE	0	0.00	0	0	0.00	0	369	0.20	73	0	0.00	0
TOTAL P-1 LINE ITEM			0			0			73			0

DD FORM 2448, AUG 89

P-1 ITEM NO.

PAGE NO. 2 OF 2

EXHIBIT P-5

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						(E08000)	
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG .50 CAL ALL TYPES							
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
COST (In Millions)	\$ 26.7	\$ 4.9	\$ 20.0	\$ 24.2	\$ 25.0	\$ 27.2	\$ 30.7/33.9		

DESCRIPTION:

This budget line includes .50 CAL ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:

DATE									
FEBRUARY 1997									
FY									
96									
97									
98									
99									
SSN/ITEM:	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
(E07100) CTG CAL .50 BALL M33 W/M9 LINK	0	0.00	0	0	0.00	0	448	1.90	850
(E07200) CTG CAL .50 4 BALL/1 TRACER W/M9 LINK	8301	2.97	24689	2072	2.39	4949	9146	2.09	19127
(F88000) CTG CAL .50 APT, MK211	194	10.41	2019	0	0.00	0	0	0.00	0
(F88000) CTG CAL .50 SLAPT M903 (M962 TRACER)	194	10.41	2019	0	0.00	0	0	0.00	0
TOTAL P-1 LINE ITEM			26708			4949			19977
									24216

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 BALL M33 W/M9 LINK

(E07100)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	-0-	448	2539	2560	2568	2596/2594	
COST (In Millions)	\$ -0-	\$ -0-	\$.9	\$ 4.9	\$ 5.1	\$ 5.2	\$ 5.4/5.5	

DESCRIPTION:

The caliber .50 ball M33 is linked with the M9 links for use in Army training with caliber .50 machine guns, M2 and M3. These rounds are also used in function test firing of the M2 and M3 machine guns. This item is Code A, approved for service use. This item will be procured at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1951

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QM1DOC4Z

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305-00-028-6574
(E07100)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:
CTG CAL .50 BALL M33 W/M9 LINK

ELEMENT OF COST QM: EACH	FY 96		FY 97		FY 98		FY 99		FY 99		FY 99		TOTAL	UNIT COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
	QTY	(QTY	QTY	(QTY	QTY	(QTY	QTY	(QTY	QTY	(QTY	QTY	(QTY								
HARDWARE																				
1.LOAD ASSEMBLE, AND PACK (LAP)																				
2.BOX METAL M2A1																				
3.LINK M9																				
4.PROPELLANT																				
WC860 (LB)																				
SUBTOTAL																				
PRODUCTION SUPPORT																				
1.PRODUCTION ENGINEERING																				
2.QUALITY ASSURANCE																				
3.ACCEPTANCE TESTING																				
4.INTERIM TRANSPORTATION																				
5.INDUSTRIAL STOCK SUPPORT																				
SUBTOTAL																				
TOTAL P-1 LINE ITEM																				

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-00-028-6574 (E07100)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 BALL M33 W/M9 LINK

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1994	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 93	OCT 94	6522600	1.05			
FY 1998	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 97	OCT 98	447626	1.29	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	2538951	1.32			
2. BOX METAL M2A1										
FY 1994	BROCKWAY STANDARD HOMERVILLE, GA	C/FP	IOC	JAN 94	JUL 94	66531	5.68			
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	4566	5.74	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	25898	5.86			
3. LINK M9										
FY 1994	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	JAN 94	JUL 94	6653053	.07			
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	451655	0.07	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	2561802	0.07			

REMARKS:

TBS - To Be Selected

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION P-1 ITEM NOMENCLATURE NSN = 1305-00-028-6574 (E07100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
4. PROPELLANT WC860 (LB) **										
FY 1994 OLIN ST. MARKS, FL		SS/FP	IOC	AUG 94	SEP 94	18491	5.98			
FY 1998 OLIN ST. MARKS, FL		SS/FP	IOC	AUG 98	SEP 98	15399	6.55	YES	NO	
FY 1999 OLIN ST. MARKS, FL		SS/FP	IOC	AUG 99	SEP 99	87340	6.69			

REMARKS:

** PACING COMPONENT

PRODUCTION SCHEDULE (EXHIBIT P-21)

APPROPRIATION/BUDGET ACTIVITY										PRODUCTION SCHEDULE (EXHIBIT P-21)										DATE		FEBRUARY 1997		REQUIREMENTS CONTROL SYMBOL	
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										P-1 ITEM NOMENCLATURE															
CTG CAL .50 BALL M33 W/M9 LINK																									
FISCAL YEAR										FISCAL YEAR										FISCAL YEAR		99			
FISCAL YEAR										FISCAL YEAR										FISCAL YEAR		99			
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BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 4 BALL/1 TRACER W/M9 LINK

(E07200)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	8301	2072	9146	9036	9150	9202	9203/0300	
COST (In Millions)	\$ 24.7	\$ 4.9	\$ 19.1	\$ 19.3	\$ 20.0	\$ 20.5	\$ 21.2/21.7	

DESCRIPTION:

This item consists of M33 ball and M17 tracer linked 4 to 1 with the M9 link. These cartridges in the linked configuration are for training use in either vehicle mounted or ground mounted machine guns. The tracer round permits observation of the bullet's trajectory to the point of impact. The ammunition is designed for use in the M2 or M3 machine guns. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1968

RCS: DO-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QM1D0C4Z

APPROPRIATION BUDGET ACTIVITY:

DATE: FEBRUARY 1997

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:

NSN = 1305-01-370-2594
(E07200)

CTG CAL .50 4 BALL/1 TRACER W/M9 LINK

FY 96 (QTY		8301194)	FY 97 (QTY	2072000)	FY 98 (QTY	9145713)	FY 99 (QTY	9036219)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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1.LOAD, ASSEMBLE, AND PACK (LAP)	8301194	1.93	16010	3072000	1.63	3383	9145713	1.39	12751	9036219	1.42	12862																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2.BOX METAL M2A1	84673	5.62	4751	21135	5.07	1071	93287	5.74	535	92170	5.86	540																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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4.PROPELLANT	234924	6.50	1526	58638	5.83	342	251508	6.55	1648	248497	6.69	1663																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5.PROP INR 5010 (LB)	55618	15.15	843	13883	17.74	246	65850	14.61	962	65061	14.92	971																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-370-2594

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 4 BALL/1 TRACER W/M9 LINK

(E07200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL.
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	JAN 96	OCT 96	8301194	1.93			
FY 1997	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	JAN 97	OCT 97	2072000	1.63	YES	NO	
FY 1998	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 97	OCT 98	9145713	1.39	YES	NO	
FY 1999	OLIN CORP INDEPENDENCE, MO	SS/CPAF	IOC	NOV 98	OCT 99	9036219	1.42			
2. BOX METAL M2A1										
FY 1996	BROCKWAY STANDARD HOMERVILLE, GA	C/FP	IOC	JUN 96	SEP 96	84673	5.62			
FY 1997	TBS	C/FP	IOC	MAR 97	JUL 97	21135	5.07	YES	NO	
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	93287	5.74	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	92170	5.86			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 7

PAGE NO. 13 of 23

EXHIBIT P-5A

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-370-2594

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 4 BALL/1 TRACER W/M9 LINK

(E07200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. LINK M9										
FY 1996	VALENTEC WELLS COSTA MESA, CA	C/FP	IOC	JUN 96	SEP 96	8375905	0.06			
FY 1997	TBS	C/FP	IOC	MAR 97	JUL 97	2090648	0.06	YES	NO	
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	9228025	0.07	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	JUL 99	9117545	0.07			
4. PROPELLANT WC860 (LB) **										
FY 1996	OLIN ST. MARKS, FL	SS/FP	IOC	APR 96	JUN 96	234924	6.50			
FY 1997	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 97	SEP 97	58638	5.83	YES	NO	
FY 1998	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 98	SEP 98	251508	6.55	YES	NO	
FY 1999	OLIN ST. MARKS, FL	SS/FP	IOC	AUG 99	SEP 99	248497	6.69			

REMARKS:

** PACING COMPONENT
TBS - To Be Selected

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-01-370-2594

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
5. PROP IMR 5010 (LB)										
FY 1996	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	SEP 96	SEP 96	55618	15.15			
FY 1997	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	AUG 97	SEP 97	13883	17.74	YES	NO	
FY 1998	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	AUG 98	SEP 98	65850	14.61	YES	NO	
FY 1999	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	AUG 99	SEP 99	65061	14.92			

REMARKS:

PRODUCTION SCHEDULE (EXHIBIT P-21)										DATE		FEBRUARY 1997		REQUIREMENTS SYMBOL		DD-COMP (AR) 1092									
APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE															
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										CTG CAL .50 4 BALL/1 TRACER W/M9 LINK															
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MAR										MAR															
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AUG										AUG															
SEP										SEP															
OCT																									

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE								
PROCUREMENT OF AMMUNITION /Ammunition		FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	CTG CAL .50 SLAPT M903 (M962 TRACER) (F88000)
QUANTITY		194	0	0	0	0	0	0	250	
COST (in millions)		2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	
<p>DESCRIPTION:</p> <p>The Caliber, Saboted Light Armor Penetrator (SLAP), M903 cartridge consists of a heavy metal penetrator which is sabot launched at a much higher velocity than standard rounds, with Tracer, M962. The sabot is designed to break up at the muzzle to release the penetrator to survive the gun environment until launch; it is injection molded of special high strength plastic and is reinforced with an aluminum insert in the base section. The tungsten alloy penetrator has a slot in the base to insure full spin-up before separation from the sabot at the muzzle. The companion tracer cartridge, M962, consists of a tungsten alloy penetrator of the same mass as the M903 and is launched from a sabot of the same material and similar design. The penetrator base is cored out to accommodate a trace mix composition. This ammunition is linked four M903 SLAP to one M962 tracer for use in the M2 Heavy Barrel Machine Gun. The item is code A, approved for service use. The item has not transitioned to the SMCA and will be procured at actual cost.</p> <p>JUSTIFICATION:</p> <p>FY1996 procurement is intended for use against current and future light armored targets and Armored Attack Helicopters (AAHs). The M903 offers the capability to defeat these targets at ranges 2 to 3 times that of currently available ammunition.</p> <p>Type Classified (TC) Date: March 1993.</p>										

Ammo Cost Analysis				A. APPN/ BUDGET ACTIVITY TITLE/NO PROCUREMENT OF AMMUNITION / 1 / Ammunition				B. WEAPON CTG CAL. 50 SLAPT M903 (M962 TRACER) (F88000)				C. MANUFACTURER NAME OLIN, ILL				D DATE February 1997			
Ammunition Cost Elements				FY 96				FY 97				FY 98				FY 99			
				TotalCost	Qty	UnitCost	TotalCost	TotalCost	Qty	UnitCost	TotalCost	TotalCost	Qty	UnitCost	TotalCost	TotalCost	Qty	UnitCost	TotalCost
				\$000	x1000	\$	\$000	\$000	x1000	\$	\$000	\$000	x1000	\$	\$000	\$000	x1000	\$	\$
AMMUNITION HARDWARE																			
1. COMPLETE ROUND				1486	194	7.66													
2. M2A1 METAL BOX				12	2	6.19													
Subtotal AMMO Hardware				1498			0				0				0				
Production Support Costs																			
1. Production Engineering				238															
2. Quality Assurance				90															
3. Acceptance Testing				110															
4. Interim Transportation				6															
Subtotal Prod. Support				444			0				0				0				
COST - Nonrecurring																			
1. ENGINEERING CHANGE				77															
Subtotal COST-Nonrecurring				77			0				0				0				
TOTAL				2019		10.41	0				0				0				

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										DATE
B. APPROPRIATION / BUDGET ACTIVITY										February 1997
C. P-1 ITEM NOMENCLATURE										
CTG CAL .50 SLAPT M903 (M962 TRACER) (F88000)										
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST \$	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES W/A
1. COMPLETE ROUND FY 96	OLIN, ILL	SS/FP	ARDEC	Mar-96	Jun-96	80600	# 8.07			
FY 96	OLIN, ILL	MOD	ARDEC	Jan-97	Feb-97	113400	# 7.37			
2. M2A1 METAL BOX FY 96	Various	C/FP	IOC	Mar-96	May-96	1940	6.19			
REMARKS:										
# Actual Contract Price for Multiple Producers										

February 1997

February 1997

CTG CAL .50 SLAPT M903 (M962 TRACER) (F880000)

[illegible]

BUDGET ITEM JUSTIFICATION SHEET

DATE

February 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 APT, MK211., MOD 0

(F47400)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY THOUSANDS	240	329	286	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 1.9	\$ 2.0	\$ 2.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION:

For machine gun use the Grade B MK211 will be linked in a 4:1 ratio with the caliber .50 M20 Armor piercing Incendiary Tracer cartridge. The cartridge provides improved penetration performance against light armor vehicles and personnel. The projectile consists of a brass jacket surrounding a steel body and tungsten core with incendiary and high explosive charges.

JUSTIFICATION:

This is a War Reserve item, used in combat. FY 98 procurements are building toward the War Reserve requirement.

TYPE CLASSIFICATION DATE:
9 February 1996

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QM1D0C4Z

APPROPRIATION BUDGET ACTIVITY:

DATE: FEBRUARY 1997
NSN = 1305-01-249-6888
(F47400)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1.

P-1 ITEM NOMENCLATURE:

CTG CAL .50 APT, MK211.,MOD 0

		FY 96 (QTY)	FY 97 (QTY)	FY 98 (QTY)	FY 99 (QTY)		
		239800	328536	285568			
ELEMENT OF COST	UNIT COST	QTY	TOTAL	UNIT COST	QTY	TOTAL	UNIT COST
Q1: EACH							
HARDWARE							
1. LOAD ASSEMBLY, AND PACK (LAP)	6.05	239800	1450	0.38	328536	126	0.44
2. CTG CAL .50 MK				5.54	262829	1456	6.32
3. CTG CAL .50 M20				1.79	65708	118	2.04
4. LINK M9				0.06	331493	19	0.07
5. BOX METAL M2A1				5.03	3352	17	5.74
SUBTOTAL			1450			1736	
PRODUCTION SUPPORT							
1. PRODUCTION ENGINEERING			494				
2. QUALITY ASSURANCE						176	
3. ACCEPTANCE TESTING						4	
4. INTERIM TRANSPORTATION						20	
5. INDUSTRIAL STOCK SUPPORT						12	
6. CANCF GAIN/LOSS SURCHARGE						60	
SUBTOTAL			494			272	
TOTAL P-1 LINE ITEM	8.11	1944	6.22	2044	6.98	1994	*****

P-1 ITEM NO. 8

PAGE NO. 2 of 5

EXHIBIT P-5

PCN P02QMD004Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1305-01-249-6888

(F47400)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG CAL .50 API, MK211, MOD 0

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	OLIN CORP	C/FP	NAVY	JUN 96	JUL 96	239800	6.05			
FY 1997	EAST ALTON, IL	C/FP	IOC	JUL 97	JUL 98	328536	0.38	YES	NO	
FY 1998	TBS	C/FP	IOC	MAR 98	MAR 99	285568	0.44	YES	NO	
2. CTG CAL .50 MK 211 API GRADE B										
FY 1997	TBS	C/FP	IOC	JUL 97	JUL 98	262829	5.54	YES	NO	
FY 1998	TBS	C/FP	IOC	MAR 98	FEB 99	228455	6.32	YES	NO	
3. CTG CAL .50 M20 API-T										
FY 1997	OLIN CORP (LAKE CITY AAP)	SS/CPAF	IOC	MAR 97	DEC 97	65708	1.79	YES	NO	
FY 1998	OLIN CORP (LAKE CITY AAP)	SS/CPAF	IOC	NOV 97	OCT 98	57114	2.04	YES	NO	
4. LINK M9										
FY 1997	TBS	C/FP	IOC	MAR 97	DEC 97	331493	0.06	YES	NO	
FY 1998	TBS	C/FP	IOC	JAN 98	JUL 98	288139	0.07	YES	NO	

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 8 PAGE NO. 3 of 5

EXHIBIT P-5A

PCN P02QM1D0D4Z

PROCUREMENT HISTORY PLANNING DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY P-1 ITEM NOMENCLATURE NSN = 1305-01-249-6888 (F47400)
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG CA .50 APT, MK211, MOD 0

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
5. BOX METAL M2A1										
FY 1997 TBS		C/FP	IOC	MAR 97	DEC 97	3352	5.03	YES	NO	
FY 1998 TBS		C/FP	IOC	JAN 98	DEC 98	2913	5.74	YES	NO	

REMARKS:

TBS - To Be Selected

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										CTG 20MM ALL TYPES						
		FY	96	FY	97	FY	98	FY	99	FY	00	FY	01	02	FY	03
QUANTITY			-0-		-0-		-0-		-0-		-0-		-0-		-0-	-0-
COST (In Millions)	\$		-0-	\$	.3	\$	-0-	\$	-0-	\$	-0-	\$	-0-	\$	-0-	-0-

DESCRIPTION:

This budget line includes 20MM ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:

DATE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, 20MM, ALL TYPES (E08900)

FEBRUARY 1997

SSN/ITEM:	96			97			98			99		
	FY	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST
(E08902) CTG 20MM LINKED TP M55A2/TPT M220 LINKED W/14	0	0.00	0	57	5.22	300	0	0.00	0	0.00	0	0.00
TOTAL P-1 LINE ITEM			0			300			0			0

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG 25MM ALL TYPES (E08200)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 68.2	\$ 79.9	\$ 88.2	\$ 50.0	\$ 52.3	\$ 53.1	\$ 54.9	\$ 56.0

DESCRIPTION:

This budget line includes 25MM ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, 25MM, ALL TYPES (E08200)									
SSN/ITEM:	96			97			98		
	FY	QTY	UNIT COST	TOTAL	FY	QTY	UNIT COST	TOTAL	FY
(E08201) CTG 25MM HEI-T M792	0	0	0.00	411	0	0	0.00	0	0
(E08203) CTG 25MM HP-T M793	1240	488	17.97	22281	1313	14.72	15.61	20488	1078
(E08204) CTG 25MM TPDS-T M910	2272	2325	20.02	45487	1453	17.19	17.68	25678	1819
(E08210) CTG 25MM APFSDS-T M919	0	255	0.00	0	325	128.60	129.24	42000	0
TOTAL P-1 LINE ITEM				68179		79924		88166	50005

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG 25MM TP-T M793 (E08203)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	1240	488	1313	1078	1120	1092	1102/1087	
COST (In Millions)	\$ 22.3	\$ 7.2	\$ 20.5	\$ 17.2	\$ 18.2	\$ 18.2	\$ 18.8/19.0	

DESCRIPTION:

The M793 cartridge is a percussion primed 25mm Target Practice-Traced (TP-T) cartridge with M28 link for use in the M242 gun which is mounted on the Bradley Fighting Vehicle System. The M793 training round is ballistically matched to the M792 High Explosive Incendiary-Tracer (HEI-T) ammunition. This round will be packaged/shipped in the M621 plastic container, 30 rounds per container. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1979

RCS: DD-COMP (AR) - 1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1100045

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305-01-356-0189
(E08203)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:
CTG 25MM TP-T M793

		FY 96	(QTY	FY 97	(QTY	487501	FY 98	(QTY	1312679	FY 99	(QTY	1078400
ELEMENT OF COST	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
QM: EACH		COST			COST			COST			COST	
HARDWARE												
1. LOAD, ASSEMBLE, AND PACK (LAP)	1239900	14.11	17499	487501	12.47	6079	1312679	12.42	16305	1078400	12.68	13676
2. CONTAINER PA125							43844	31.37	1375	36019	32.02	1153
SUBTOTAL			17499			6079			17680			14829
PRODUCTION SUPPORT												
1. PRODUCTION ENGINEERING			542			251			1807			1516
2. QUALITY ASSURANCE			24			9			44			37
3. ACCEPTANCE TESTING			201			66			203			171
4. INTERIM TRANSPORTATION			66			58			127			107
5. INDUSTRIAL STOCK SUPPORT			750			711			627			524
6. CAWCF GAIN/LOSS SURCHARGE			3199									
SUBTOTAL			4782			1095			2808			2355

TOTAL P-1 LINE ITEM		17.97	22281		14.72	7174		15.61	20488		15.93	17184

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-356-0189

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 25MM TP-T M793

(E08203)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES: WHEN AVAIL.
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	ALLIANT TECH SYS, INC	C/FP	IOC	APR 96	MAY 97	770130	# 11.40			
FY 1996	JOLIET, IL	C/FP	IOC	APR 96	MAY 97	469770	# 12.47			
FY 1997 TBS	OLIN ORDNANCE	C/FP	IOC	MAR 97	MAY 98	487501	12.47	YES		NO
FY 1998 TBS	MARION, IL	C/FP	IOC	MAR 98	MAY 99	1312679	12.42	YES		NO
FY 1999 TBS		C/FP	IOC	MAR 99	MAY 00	1078400	12.68			
2. CONTAINER PA125										
FY 1998 TBS		C/FP	IOC	MAR 98	MAR 99	43844	31.37	YES		NO
FY 1999 TBS		C/FP	IOC	MAR 99	MAR 00	36019	32.02			

REMARKS:

ACTUAL CONTRACT PRICE FOR MULTIPLE PRODUCERS
TBS - To Be Selected

P-1 ITEM NO. 10 PAGE NO. 5 of 17

EXHIBIT P-5A

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS : ATP-4 SYMBOL,

APPROPRIATION/BUDGET ACTIVITY

21 TERM

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY	1. AMMUNITION	FISCAL YEAR
---------------------------------------	---------------	-------------

CTG 25MM TP-T M793

E08203

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO COMPLETION AFTER D-DAY
		MINIMUM	MAXIMUM	
1	ALLIANT TECH SYS	0.26	0.26	0.75
2	OLIN ORDNANCE IL	0.08	0.20	0.52
3	TO BE SELECTED	0.08	0.20	0.52

	PROCUREMENT LEAD TIME			
	ADMIN LEADTIME		PROD.	TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT		
INITIAL	6	6	14	20
REORDER	6	4	14	18

REMARKS

QUANTITY IN MILLIONS

DD COMP (AR) 1022

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION. ARMY/ACTIVITY 1. AMMUNITION

CTG 25MM TP-T M793

E08203

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MOVES TO REACH MAX AFTER D-DAY
		MINIMUM SUST.	1-8-5 MAXIMUM	
1	ALLIANT TECH SYS	0.26	0.26	0.75
2	OLIN ORDNANCE IL	0.08	0.20	0.52
3	TO BE SELECTED	0.08	0.20	0.52

	PROCUREMENT LEAD TIME		
	ADMIN LEADTIME PRIOR 1 OCT	AFTER 1 OCT	PROD. AFTER 1 OCT
INITIAL	6	6	14
REORDER	6	4	14

REMARKS

QUANTITY IN MILLIONS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 25MM TPDS-T M910

(E08204)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	2272	2325	1453	1819	1847	1856	1875	1874
COST (In Millions)	\$ 45.5	\$ 40.0	\$ 25.7	\$ 32.8	\$ 34.0	\$ 35.0	\$ 36.2	\$ 37.0

DESCRIPTION:

The 25mm Armor Piercing (AP) training round is ballistically matched to the 25mm cartridge AP Discarding Sabot, with Tracer M791 and the AP Fin Stabilized Discarding Sabot, with Tracer M919. The M910 is used in gunnery training and qualification of the M2/M3 Bradley Fighting Vehicles in lieu of the M791 and the M919. This round supports live Bradley Fighting Vehicle training at smaller facilities that cannot use the long range combat cartridges. This item is Code A, approved for service use. This item will be procured through the CAMCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals. The maximum range of the current APDS-T and the follow-on APFSDS-T cartridges precludes their use on most training ranges. Bradley Fighting Vehicle crews cannot obtain meaningful training without this round.

TYPE CLASSIFICATION DATE:

1988

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1305-01-350-5265

CTG 25MM TPDS-T M910

(E08204)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	ALLIANT TECH SYS, INC	C/FP	IOC	APR 96	MAY 97	1579980	# 12.90			
FY 1996	JOLIET, IL	C/FP	IOC	APR 96	MAY 97	692070	# 14.43			
FY 1997 TBS	MARION, IL	C/FP	IOC	MAR 97	MAY 98	2325093	14.56	YES	NO	
FY 1998 TBS		C/FP	IOC	MAR 98	MAY 99	1452658	14.21	YES	NO	
FY 1999 TBS		C/FP	IOC	MAR 99	MAY 00	1818653	14.50			
2. CONTAINER PA125										
FY 1998 TBS		C/FP	IOC	MAR 98	MAR 99	48519	31.37	YES	NO	
FY 1999 TBS		C/FP	IOC	MAR 99	MAR 00	60744	32.02			

REMARKS:

ACTUAL CONTRACT PRICE FOR MULTIPLE PRODUCERS
TBS - To Be Selected

P-1 ITEM NO. 10

PAGE NO. 10 of 17

EXHIBIT P-5A

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CATEGORICAL NUMBER
DD COMP (AP) 1002

P-1 ITEM NOMENCLATURE
CTG 25MM TPDs-T M910

APPROPRIATION/BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FISCAL YEAR 96 97 98 99

FISCAL YEAR 96 97 98 99

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REMARKS

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REACH MAX AFTER D-DAY		PROCUREMENT LEAD TIME			
		MINIMUM	MAXIMUM	1-8-5	MAXIMUM	ADMIN LEADTIME	PROD.	TOTAL	
1	ALLIANT TECH IL	0.26	0.26	0.26	0.75	12	4	14	20
2	OLIN ORDNANCE IL	0.33	0.33	0.33	0.94	12	4	14	20
3	TO BE SELECTED	0.20	0.24	0.75	12	12	4	14	18

QUANTITY IN MILLIONS

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL, CYMR L.
DD COMP (AP) 109)

PRODUCTION SCHEDULE
APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY

CTG 25MM TPD5-T M910

F08204

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REACH MAX AFTER 5-DAY
		MINIMUM SUST.	1-8-5 MAXIMUM	
1	ALLIANT TECH IL	0.26	0.26	0.75 12
2	OLIN ORDNANCE IL	0.33	0.33	0.94 12
3	TO BE SELECTED	0.20	0.24	0.75 12

PROCUREMENT LEAD TIME			
	ADMIN LEADTIME		TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT	
INITIAL	4	6	14
REORDER	4	4	14

REMARKS

QUANTITY IN MILLIONS

BUDGET ITEM JUSTIFICATION SHEET

February 1997

APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE										DATE
PROCUREMENT OF AMMUNITION /Ammunition		CTG 25MM APFSDS-T M919 (E08210)										
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003				
QUANTITY	0	255	325	0	0	0	0	0				
COST (in millions)	0.0	32.8	42.0	0.0	0.0	0.0	0.0	0.0				

DESCRIPTION:

The 25mm Armor Piercing Fin Stabilized Discarding Sabot - Tracer (APFSDS-T) M919. The M919 uses the state-of-the-art technology by incorporating high energy propellants, low drag design, and improved penetrator material. This item is Code A, approved for service use. This item has not transitioned to the SMCA and will be procured at actual cost.

JUSTIFICATION:

The M919 will replace the M791 as the primary armor piercing cartridge for use in the 25mm, M242 Automatic Gun which is mounted on the M2/M3 Bradley Fighting Vehicle System, thus increasing its effectiveness against light threat weapon systems and enhancing its survivability. The current M791 does not defeat the current threat.

Type Classification Date: TC Limited Production Urgent, September 1989.

TC Standard September 1993.

Limited Material Release: September 1996

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)		A. Appropriation Budget Activity Title/No. Procurement Ammunition, ARMY/Activity 1. Ammunition				B. WEAPON CTG 25MM APFSDS-T M919 (E08210)				C. MANUFACTURER NAME PLANT CITY/STATE LOCATION PRIMEX-MARION, IL				D. DATE February 1997	
Weapon System Cost Elements	Ident. Code	FY96 (QTY: 0)		FY97 (QTY: 255)		FY98 (QTY: 325)		FY99 (QTY: 0)							
		Unit Cost	Qty	Total Cost	Unit Cost	Qty x1000	Total Cost	Unit Cost	Qty x1000	Total Cost	Unit Cost	Qty	Total Cost		
HARDWARE	A				122	255	31,060	125	325	40,502					
1. COMPLETE ROUND															
				0			31,060			40,502					
SUBTOTAL HARDWARE COST							1080			1108					
PRODUCTION SUPPORT							120			125					
1. ENGINEERING SUPPORT							129			135					
2. QUALITY ASSURANCE							124			130					
3. PROOF & ACCEPTANCE															
4. INTERIM TRANSPORTATION															
SUBTOTAL SUPPORT COST				0			1,433			1,498					0
NON-RECURRING COST							300								
1. PURSUIT OF 25MM REFERENCE LOT															
SUBTOTAL NON-RECURRING COST				0			300								
TOTAL P-1 LINE ITEM				0			32,793			42,000					
PROGRAM UNIT COST							128.60			129.24					
P-1 SHOPPING LIST Item No. 10 Page 14 of 17										UNCLASSIFIED		Exhibit P-5 Weapon System Cost Analysis			

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										DATE
B. APPROPRIATION / BUDGET ACTIVITY										February 1997
C. P-1 ITEM NOMENCLATURE										
CTG 25MM APFSDS-T M919 (E08210)										
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST \$	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES W/A
1. COMPLETE ROUND										
FY 95	Olin-Marion, IL	OPTION	ARDEC	Aug-96	Sep-97	160317	130.99			
FY 97	PRIMEX-MARION, IL	SS/FP	ARDEC	Jul-97	May-98	255000	121.80	YES	NO	
FY 98	PRIMEX-MARION, IL	OPTION	ARDEC	May-98	May-99	324977	124.63		NO	
REMARKS:										

[illegible]

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG 30MM ALL TYPES (ER8120)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 4.2	\$ 10.0	\$ 10.4	\$ 7.3	\$ 7.5	\$ 7.8	\$ 8.0	\$ 8.2

DESCRIPTION:

This budget line includes 30MM ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, 30MM, ALL TYPES (ER8120)									
DATE									
FY 96 FY 97 FY 98 FY 99									
SSN/ITEM:	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
(E09900) CTG 30MM HEDP M789	0	0.00	0	259	38.55	9991	0	0.00	0
(E10100) CTG 30MM TP M788	313	13.34	4169	0	0.00	0	961	10.78	10357
TOTAL P-1 LINE ITEM			4169			9991			10357
									7273

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 30MM LKD HEDP M789 W/FUZE

(E09900)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	259	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ -0-	\$ 10.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION:

The M789 lightweight 30MM high explosive-dual purpose (HEDP) cartridge is comprised of a steel projectile body loaded with HMX explosive and spin-compensated shaped charged liner, an M759 point detonating fuze, and an aluminum cartridge case. It is designed for use in the M230 automatic cannon. This item is Code A, approved for service use, and will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a "war reserve" item used for combat; planned procurements will be used to build the "war reserve" stockpile.

TYPE CLASSIFICATION DATE:

1962

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

FCU: P02QM1D0015

APPROPRIATION BUDGET ACTIVITY

DATE: FEBRUARY 1997
NSN = 1305-01-268 9373P-1 ITEM NOMENCLATURE:
CTG 30MM HEDP M789

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FY 96		FY 97		FY 98		FY 99		TOTAL	
ELEMENT OF COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
QM: EACH									
HARDWARE									
1. LOAD ASSEMBLE, AND PACK (LAP)				259179	26.48	6863			
2. PBXN 5 TYPE II, CLASS 3 (LB)				17262	72.78	1256			
3. PBXN-5 TYPE I, CLASS 3 (LB)				156	72.78	11			
4. *RDX TYPE II, CLASS 7 (LB)				78	4.24				
SUBTOTAL						8130			
PRODUCTION SUPPORT									
1. PRODUCTION ENGINEERING						372			
2. QUALITY ASSURANCE						11			
3. ACCEPTANCE TESTING						89			
4. INTERIM TRANSPORTATION						77			
5. INDUSTRIAL STOCK SUPPORT						322			
6. CAWCF GAIN/LOSS SURCHARGE						990			
SUBTOTAL						1861			
NONRECURRING									
1. *GOVERNMENT FURNISHED MATERIAL									
SUBTOTAL									

TOTAL P-1 LINE ITEM						38.55			9991

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-268-9373

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 30MM HEDP M789

(E099000)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPEC AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1991	ALLIANT TECH SYS, INC NEW BRIGHTON, MN	C/FP	IOC	MAY 94	AUG 95	494340	37.32			
FY 1997	TBS	C/FP	IOC	MAR 97	MAR 98	259179	26.48	YES	NO	
2. PBXN 5 TYPE II, CLASS 3 (LB)										
FY 1991	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	JAN 92	DEC 92	33764	15.59			
FY 1997	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	FEB 97	FEB 98	17262	72.78	YES	NO	
3. PBXN-5 TYPE I, CLASS 3 (LB)										
FY 1991	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	JAN 92	DEC 92	89	17.57			
FY 1997	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	FEB 97	FEB 98	156	72.78	YES	NO	

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 11

PAGE NO. 5 of 12

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-268-9373

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 30MM HEDP M789

(E099900)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES: WHEN AVAIL
4. *RDX TYPE II, CLASS 7 (LB)										
FY 1991 STOCK ISSUE		N/A	N/A	N/A	N/A	89	N/A	N/A	N/A	
FY 1997 STOCK ISSUE		N/A	N/A	N/A	N/A	78	N/A	N/A	N/A	

REMARKS:

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 30MM TP M788

(E10100)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	313	-0-	961	661	670	674	681/681	
COST (In Millions)	\$ 4.2	\$ -0-	\$ 10.4	\$ 7.3	\$ 7.5	\$ 7.8	\$ 8.0/8.2	

DESCRIPTION:

The 30mm Linked Target Practice (TP) M788 cartridge is an electric primed aluminum cased cartridge which is used in the 30mm M230 chain gun weapon system. The system is used as the secondary armament system on the Apache Advanced Attack Helicopter (AH-64). This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1982

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

PCN: P02QM1P00043

DATE: FEBRUARY 1997
NSN = 1305-01-268-7274
(E10100)

		FY 96	(QTY	312520)	FY 97	(QTY	)	FY 98	(QTY	960525)	FY 99	(QTY	660672)
ELEMENT OF COST	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL		TOTAL	QTY	UNIT	TOTAL	QTY	UNIT
QM: EACH		COST			COST					COST			COST
HARDWARE													
1. COMPLETE ROUND	312520	10.48	3274						960525	9.31	8938	660672	9.50
SUBTOTAL			3274								8938		
PRODUCTION SUPPORT													
1. PRODUCTION ENGINEERING			101								913		641
2. QUALITY ASSURANCE			5								22		16
3. ACCEPTANCE TESTING			38								103		72
4. INTERIM TRANSPORTATION			12								64		45
5. INDUSTRIAL STOCK SUPPORT			141								317		223
6. CAWCF GAIN/LOSS SURCHARGE			598										
SUBTOTAL			895								1419		997
TOTAL P-1 LINE ITEM			4169								10357		7273
											10.78		11.01

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1305-01-268-7274

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 30MM TP M788

(E10100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. COMPLETE ROUND										
FY 1996	ALLIANT TECH SYS, INC	C/FP	IOC	JUN 96	MAY 97	312520	10.48			
FY 1998 TBS	JOLIET, IL	C/FP	IOC	MAR 98	MAR 99	960525	9.31	YES	NO	
FY 1999 TBS		C/FP	IOC	MAR 99	MAR 00	660672	9.50			

REMARKS:

TBS - To Be Selected

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG 40MM ALL TYPES (ER8001)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 48.9	\$ 33.0	\$ 26.2	\$ 36.8	\$ 37.0	\$ 41.8	\$ 39.7	\$ 40.4

DESCRIPTION:

This budget line includes 40MM ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, 40MM, ALL TYPES (ER8001)									
DATE									
FEBRUARY 1997									
SSN/ITEM:	96			97			98		
	FY	QTY	UNIT COST	TOTAL	FY	QTY	UNIT COST	TOTAL	FY
(E11800) CTG 40MM HEDP M430 F/MK19 MG	746	18.08	13496	0	0	0.00	0	0.00	0
(E12502) CTG 40MM PRACTICE M385A1	0	0.00	0	0	0	0.00	0	0.00	599
(E71100) CTG 40MM TP M918 LINKED F/MK19 MG	1940	17.29	33540	2125	14.54	30889	1331	16.11	21436
(E74200) CTG 40MM PRACTICE M781	316	5.81	1837	980	2.12	2080	2005	2.38	4767
TOTAL P-1 LINE ITEM			48873			32969		26203	36845

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM HEDP M430 F/MK19 MG

(E11800)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	746	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 13.5	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION:

The M430 cartridge is a high-explosive dual-purpose (HEDP) impact type round. This cartridge is fired from the MK19 MOD 3 grenade machine gun mounted on the high-mobility multi-purpose vehicle (HMMV) and other vehicles. It is capable of penetrating two inches of steel armor plate at zero angle of obliquity and inflicting personnel casualties in the target area. This round replaces the M383 and M384 cartridges, which were strictly anti-personnel in nature. The M430 is a fixed round of ammunition consisting of an internally embossed one-piece projectile body that contains an explosive charge of composition A-5 with a copper cone-shaped charge liner, a rotation band, and a M549 point initiating base detonating fuze with spitback and is crimped to the cartridge case. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. Procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1971

RCS: DD-COMP (AR) - 1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1DOC4Z

APPROPRIATION BUDGET ACTIVITY
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:
 CTG 40MM HEDP M430 F/MK19 MG

DATE: FEBRUARY 1997
 NSN = 1310-01-419-8203
 (E11800)

ELEMENT OF COST QM: EACH	FY 96 (QTY		746295) FY 97 (QTY		) FY 98 (QTY		) FY 99 (QTY		TOTAL	UNIT COST	QTY	UNIT COST	TOTAL	UNIT COST	QTY	TOTAL
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST									TOTAL
HARDWARE																
1. LOAD, ASSEMBLE, AND PACK (LAP)	746295	3.83	2857													
2. BODY ASSY MPTS	776147	1.22	945													
3. LINER FLUTED EXT	771968	0.66	510													
4. COMP A-5, CLASS 1 (LB)	70899	13.81	979													
5. *LEAD AZIDE (SP) (LB)	224	23.52	5													
6. CTG CASE M169	776147	0.87	674													
7. PROP M2 SP .019 (LB)	11941	24.14	288													
8. COMP CH-6 (LB)	598	30.20	18													
9. FZ PIBD M549A1	776147	5.19	4027													
10. *DET STAB M55	783610	0.36	285													
11. RDX TYPE II, CLASS 3 (LB)	75	14.04	1													
12. LINK M16A2	791073	0.22	172													
13. LAP TEST VEH F/M430	16718	3.49	58													
14. LAP SPITBACK ASSY	16718	0.58	10													
SUBTOTAL			10829													
PRODUCTION SUPPORT																
1. PRODUCTION ENGINEERING			336													
2. QUALITY ASSURANCE			15													
3. ACCEPTANCE TESTING			125													
4. INTERIM TRANSPORTATION			41													
5. INDUSTRIAL STOCK SUPPORT			460													
6. CAWCF GAIN/LOSS SURCHARGE			1980													
SUBTOTAL			2957													

RCS: DD-COMP (AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QMIDOC4Z

DATE: FEBRUARY 1997
NSN = 1310-01-419-8203
(E11800)

P-1 ITEM NOMENCLATURE:
CTG 40MM HEDP M430 F/MK19 MG

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

		FY 96	(QTY	746295)	FY 97	(QTY	FY 98	(QTY	)	FY 99	(QTY)
ELEMENT OF COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
NONRECURRING												
1.*GOVERNMENT FURNISHED MATERIAL			-290									
SUBTOTAL			-290									

TOTAL P-1 LINE ITEM		18.08	13496									

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1310-01-419-8203

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM HEDP M430 F/MK19 MG

(E11800)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JUL 96	MAR 98	746295	3.83			
2. BODY ASSY MPTS										
FY 1996	EMCO INC GADSDEN, AL	C/FP	IOC	JUN 96	SEP 96	776147	1.22			
3. LINER FLUTED EXT										
FY 1996	GAYSTON CORP SPRINGBORO, OH	C/FP	IOC	JUL 96	APR 97	771968	0.66			
4. COMP A-5, CLASS 1 (LB)										
FY 1996	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	MAY 96	SEP 96	70899	13.81			
5. *LEAD AZIDE (SP) (LB)										
FY 1996	STOCK ISSUE	N/A	N/A	N/A	N/A	224	N/A			

REMARKS:

CTG 40MM HEDP M430A1 F/MK19 MG.-----WITH NEW IMPROVED FUZE M549A1

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1310-01-419-8203

CTG 40MM HEDP M430 F/MK19 MG

(E11800)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
6. CTG CASE M169										
FY 1996	AMRON CORP WAUKESHA, WI	SS/FP	IOC	SEP 96	NOV 96	776147	0.87			
7. PROP M2 SP .019 (LB)										
FY 1996	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	MAY 96	OCT 96	11941	24.14			
8. COMP CH-6 (LB)										
FY 1996	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	MAY 96	SEP 96	598	30.20			
9. FZ PIBD M549A1 **										
FY 1996	DAYRON CORP ORLANDO, FL	C/FP	IOC	JUL 96	FEB 97	776147	5.19			
10. *DET STAB M55										
FY 1996	STOCK ISSUE	N/A	N/A	N/A	N/A	783610	N/A			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 12

PAGE NO. 7 of 29

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1310-01-419-8203

CTG 40MM HEDP M430 F/MK19 MG

(E11800)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES: WHEN AVAIL
11. RDX TYPE II, CLASS 3 (LB)										
FY 1996	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	MAY 96	SEP 96	75	14.04			
12. LINK M16A2										
FY 1996	TBS	C/FP	IOC	FEB 97	AUG 97	791073	0.22			
13. LAP TEST VEH F/M430										
FY 1996	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	AUG 96	OCT 96	16718	3.49			
14. LAP SPITBACK ASSY										
FY 1996	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	AUG 96	OCT 96	16718	0.58			

REMARKS:

TBS - To Be Selected

PRODUCTION SCHEDULE (EXHIBIT P-21)																									REQUIREMENTS CONTROL SYMBOL DD COMP (AR) 1092											
APPROPRIATION/BUDGET ACTIVITY																									DATE FEBRUARY 1997											
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION																									P-1 ITEM NOMENCLATURE CTG 40MM HEDP M430 F/MK19 MG											
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FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES			MONTHS TO REACH MAX AFTER D-DAY		
		1-8-5	MAXIMUM	1-8-5	MAXIMUM	1-8-5	MAXIMUM
1	MILAN AAP MILAN, TN	0.00	0.32	0.84	0		
2	DAYRON ORLANDO, FL	0.10	0.20	0.40	0		
3	TO BE SELECTED	0.10	0.20	0.40	0		

PROCUREMENT LEAD TIME				TOTAL AFTER 1 OCT	
PRIOR 1 OCT	AFTER 1 OCT	PROD.	INITIAL	REORDER	REORDER
6	3	19	22		
6	3	16	19		

REMARKS COMPONENT				TOTAL	
INITIAL	UALT	ALT	PDN	INITIAL	REORDER
6	6	10	9	19	
6	6	10	6	16	

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM TP M918 LINKED F/MK19 MG

(E71100)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	1940	2125	1331	2000	1948	2180	2005/1676	
COST (In Millions)	\$ 33.5	\$ 30.9	\$ 21.4	\$ 32.9	\$ 32.7	\$ 37.4	\$ 35.2/30.2	

DESCRIPTION:

The 40mm Target Practice (TP) cartridge for the MK19 Machine Gun is a high velocity training projectile with realistic signature effects providing sufficient flash, smoke, and sound upon impact to be seen/heard at a 1200 meter minimum range under standard atmospheric conditions and level terrain. In addition to providing audible/visual signature for day or night firing, the TP for MK19 gun will minimize hazard to troops in the training area. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals. This cartridge is required since firing the standard service 40mm high-explosive dual-purpose (HEDP) M430 cartridge is prohibited at many training ranges. The M918 allows frequent and safe MK19 MOD 3 40mm Grenade Machine Gun and M129 Grenade Launcher training.

TYPE CLASSIFICATION DATE:

1985

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P0204H10044

APPROPRIATION BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE:

DATE: FEBRUARY 1997
NSN = 1310-01-317 5948
(E71100)

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM TP M918 LINKED F/MK19 MG

FY 96		(QTY	1940405)	FY 97	(QTY	2125151)	FY 98	(QTY	1330621)	FY 99	(QTY	1999185)	
ELEMENT OF COST		QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
QM: EACH													
HARDWARE													
1. LOAD ASSEMBLE, AND PACK (LAP)	1940405	2.91	5652	2125151	2.67	5685	1330621	3.84	5107	1999185	3.92	7833	
2. PROJ ASSY	1998618	6.96	13914	2188906	6.32	13844	1370540	5.36	7345	2059161	5.47	11266	
3. CTG CASE M169	2018022	0.92	1854	2210158	0.79	1743	1383846	1.15	1597	2079153	1.18	2450	
4. PROP M2 SP .019 (LB)	29107	26.12	760	31878	21.93	699	19960	24.85	496	29988	25.37	761	
5. M550 ESCAPE ASSY	2043635	1.49	3039	2238210	1.35	3019	1401411	1.67	2346	2105542	1.71	3599	
6. DET STAB M55	2047128	0.32	665	2242035	0.33	740	1403806	0.38	529	2109141	0.38	811	
7. LINK M16A2	2056830	0.22	463	2252661	0.20	445	1410459	0.76	1079	2119137	0.78	1655	
SUBTOTAL			26347			26175			18499			38375	
PRODUCTION SUPPORT													
1. PRODUCTION ENGINEERING			817			1082			1891			2900	
2. QUALITY ASSURANCE			37			37			46			71	
3. ACCEPTANCE TESTING			303			285			213			326	
4. INTERIM TRANSPORTATION			100			249			133			204	
5. INDUSTRIAL STOCK SUPPORT			1120						654			1005	
6. CAWCF GAIN/LOSS SURCHARGE			4816			3061							
SUBTOTAL			7193			4714			2937			4506	

TOTAL P-1 LINE ITEM:			17.29	33540	14.54			16.11			16.45		32881

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1310-01-317-5948

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM TP M918 LINKED F/MK19 MG

(E71100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL.
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JUL 96	JUN 97	1940405	2.91			
FY 1997	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	APR 97	AUG 98	2125151	2.67	YES	NO	
FY 1998	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	DEC 97	APR 99	1330621	3.84	YES	NO	
FY 1999	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	DEC 98	APR 00	1999185	3.92			
2. PROJ ASSY **										
FY 1996	A&A ELECTRONIC AUBURNDALE, FL	C/FP	IOC	JUN 96	JAN 97	1998618	6.96			
FY 1997	TBS	C/FP	IOC	NOV 97	MAY 98	2188906	6.32	YES	NO	
FY 1998	TBS	C/FP	IOC	JUL 98	JAN 99	1370540	5.36	YES	NO	
FY 1999	TBS	C/FP	IOC	JUL 99	JAN 00	2059161	5.47	YES		

REMARKS:

** PACING COMPONENT
TBS - To Be Selected

P-1 ITEM NO. 12 PAGE NO. 15 of 29

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1310-01-317-5948

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM TP M918 LINKED F/MK19 MG

(E71100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
3. CTG CASE M169										
FY 1996	AMRON CORP WAUKESHA, WI	SS/FP	IOC	SEP 96	NOV 96	2018022	0.92			
FY 1997	AMRON CORP WAUKESHA, WI	SS/FP	IOC	JUL 97	MAY 98	2210158	0.79	YES	NO	
FY 1998	AMRON CORP WAUKESHA, WI	SS/FP	IOC	MAR 98	JAN 99	1383846	1.15	YES	NO	
FY 1999	AMRON CORP WAUKESHA, WI	SS/FP	IOC	MAR 99	JAN 00	2079153	1.18			
4. PROP M2 SP .019 (LB)										
FY 1996	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	MAR 96	OCT 96	29107	26.12			
FY 1997	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	JUL 97	NOV 97	31878	21.93	YES	NO	
FY 1998	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	DEC 97	APR 98	19960	24.85	YES	NO	
FY 1999	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	DEC 98	APR 99	29988	25.37			

REMARKS:

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1310-01-317-5948

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM TP M918 LINKED F/MK19 MG

(E71100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL, NOW	SPEC REV REQD	IF YES WHEN AVAIL
5. M550 ESCAPE ASSY										
FY 1996	DAYRON CORP ORLANDO, FL	SS/FP	IOC	SEP 96	JAN 97	2043635	1.49			
FY 1997	DAYRON CORP ORLANDO, FL	SS/FP	IOC	JUL 97	JAN 98	2238210	1.35	YES	NO	
FY 1998	DAYRON CORP ORLANDO, FL	SS/FP	IOC	JUL 98	JAN 99	1401411	1.67	YES	NO	
FY 1999	DAYRON CORP ORLANDO, FL	SS/FP	IOC	JUL 99	JAN 00	2105542	1.71			
6. DET STAB M55										
FY 1996	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	MAR 96	OCT 96	2047128	0.32			
FY 1997	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	JUL 97	FEB 98	2242035	0.33	YES	NO	
FY 1998	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	MAR 98	OCT 98	1403806	0.38	YES	NO	
FY 1999	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	MAR 99	OCT 99	2109141	0.38			

REMARKS:

P-1 ITEM NO. 12

PAGE NO. 17 of 29

EXHIBIT P-5A

PCN PO2QM1D0D4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1310-01-317-5948

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM TP M918 LINKED F/MK19 MG (F71100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL.
7. LINK M16A2										
FY 1996 TBS		C/FP	IOC	FEB 97	AUG 97	2056830	0.22			
FY 1997 TBS		C/FP	IOC	NOV 97	MAY 98	2252661	0.20	YES	NO	
FY 1998 TBS		C/FP	IOC	JUL 98	JAN 99	1410459	0.76	YES	NO	
FY 1999 TBS		C/FP	IOC	JUL 99	JAN 00	2119137	0.78			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 12

PAGE NO. 18 of 29

EXHIBIT P-5A

REQUIREMENTS CONTROL SYMBOL
DD COMP (AP) 1062APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM TP M918 LINKED F/MK19 MG

F71100

[illegible]

FAC NO.	MANUFACTURER & LOCATION	PRODUCTION RATES		MONTHS TO REPLACE AFTER D-DAY
		MINIMUM SUST.	1-8-5 MAXIMUM	
1	MILAN AAP, TN	0.00	0.38	1.30
2	DAYRON, FL	0.00	0.10	0.25
3	A & A ELECT, FL	0.00	0.13	0.25
4	TO BE SELECTED	0.00	0.10	0.50

	PROCUREMENT LEAD TIME		
	PRIOR 1 OCT	AFTER 1 OCT	TOTAL AFTER 1 OCT
INITIAL	6	3	22
REORDER	6	3	19

REMARKS FACING	COMPONENT		PDN	TOTAL
	UALT	ALT		
INITIAL	6	10	9	19
REORDER	6	10	6	16

PRODUCTION SCHEDULE (EXHIBIT P-21)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES			MONTHS TO REACH MAX AFTER D-DAY		
		MINIMUM	1-8-5	MAXIMUM	1	2	3
1	MILAN AAP, TN	0.00	0.38	1.30	0		
2	DAYRON, FL	0.00	0.10	0.25	0		
3	A & A ELECT, FL	0.00	0.13	0.25	0		
4	TO BE SELECTED	0.00	0.10	0.50	0		

PROCUREMENT LEAD TIME			
INITIAL	PROJ	ASSY	TOTAL
6	3	19	22
REORDER	6	3	16

PACING COMPONENT			
INITIAL	ALT	PDN	TOTAL
6	10	9	19
REORDER	6	6	16
QUANTITY IN MILLIONS			

BUDGET ITEM JUSTIFICATION SHEET

DATE
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION				P-1 ITEM NOMENCLATURE					
				CTG 40MM PRACTICE M781 (E74200)					
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	
QUANTITY (Thousands)	316	980	2005	1386	1406	1409	1415/1311		
COST (In Millions)	\$ 1.8	\$ 2.1	\$ 4.8	\$ 3.4	\$ 3.5	\$ 3.6	\$ 3.7/3.5		

DESCRIPTION:

The M781 practice cartridge replaced the M407 practice cartridge. The M781 is a low cost, unfuzed fixed round of practice ammunition ready for use as issued and is compatible with the M79 and M203 Grenade Launchers. The cartridge case is made of plastic material and the projectile is also plastic with an aluminum rotating band. The ogive is made of a frangible plastic material and contains a colored dye in granular form, the consistency of talcum powder, which is used to generate a signature. The propulsion system consists of a standard .38 caliber blank. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1978

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QM1DOC45

DATE: FEBRUARY 1997
NSN = 1310-01-211 8073
(E74200)P-1 ITEM NOMENCLATURE:
CTG 40MM PRACTICE M781APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FY 96		QTY	316312	FY 97	QTY	979949	FY 98	QTY	2004648	FY 99	QTY	1386027	1386027
ELEMENT OF COST		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
QM: EACH			COST			COST			COST			COST	
HARDWARE													
1. COMPLETE ROUND		316312	4.56	1443			1763	2004648	2.05	4114	1386027	2.10	2904
SUBTOTAL				1443			1763			4114			2904
PRODUCTION SUPPORT													
1. PRODUCTION ENGINEERING				45			73			420			297
2. QUALITY ASSURANCE				2			2			10			7
3. ACCEPTANCE TESTING				17			19			47			33
4. INTERIM TRANSPORTATION				5			17			30			21
5. INDUSTRIAL STOCK SUPPORT				61			206			146			103
6. CAWCF GAIN/LOSS SURCHARGE				264									
SUBTOTAL				394			317			653			461

TOTAL P-1 LINE ITEM!			5.81	1837		2.12	2080		2.38	4767		2.43	3365

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1310-01-211-8073

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM PRACTICE M781

(E74200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. COMPLETE ROUND										
FY 1996 ACTION MFG PHILADELPHIA, PA		C/FP	IOC	NOV 96	JUL 97	316312	4.56			
FY 1997 TBS		C/FP	IOC	AUG 97	MAR 98	979949	1.80	YES	NO	
FY 1998 TBS		C/FP	IOC	AUG 98	MAR 99	2004648	2.05	YES	NO	
FY 1999 TBS		C/FP	IOC	AUG 99	MAR 00	1386027	2.10	YES	NO	

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 12

PAGE NO. 25 of 29

EXHIBIT P-5A

PRODUCTION SCHEDULE (EXHIBIT P-21)										DATE FEBRUARY 1997		REQUIREMENTS CONTROL SYMBOL DD COMP (AR) 1002	
APPROPRIATION/BUDGET ACTIVITY PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										P-1 ITEM NOMENCLATURE CTG 40MM PRACTICE M781		E74200	
FISCAL YEAR										FISCAL YEAR		FISCAL YEAR	
96										97		98	
97										98		99	
98										99		00	
99										00		01	
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89										90		91	
90													

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1002**APPROPRIATION/BUDGET ACTIVITY**

P-1 ITEM NOMENCLATURE

PPPPROPRIATION/BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG 40MM PRACTICE M781

E74200

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES			MONTHS TO REACH MAX AFTER D-DAY
		MINIMUM SUST.	1-8-5	MAXIMUM	
1	PYROTECHNICS SPEC, GA	0.00	0.23	0.55	0
2	ACTION MFG, PA	0.00	0.20	0.45	0
3	TO BE SELECTED	NA	NA	NA	NA

PROCUREMENT LEAD TIME			
	ADMIN DEADLINE		TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT	
INITIAL	6	11	19
REORDER	6	5	18

REMARKS

QUANTITY IN MILLIONS

BUDGET ITEM JUSTIFICATION RECORD							DATE:	
APPROPRIATION/BUDGET ACTIVITY:							February 1997	
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION								
P-1 ITEM NOMENCLATURE:								
CTG, MORTAR, 60MM, 1/10 PRAC, M766 (E72000)								
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	5	8	0	2	4	0	0	0
COST (IN MILLIONS)	\$3.6	\$5.2	\$0.0	\$2.7	\$4.0	\$0.0	\$0.0	\$0.0
<p>DESCRIPTION:</p> <p>The M766 60mm mortar cartridge is a low-cost, short range, refurbishable practice round that will replace a majority of the standard High Explosive (HE) rounds used in the 60mm mortar training strategy. It consists of an M779 point detonating practice fuze which provides flash, bang and smoke; a steel body which approximates the shape of the 60mm HE service round; and an ignition cartridge which provides the limited propulsion requirement. After firing, the round is retrieved and refurbished. Refurbishment will be accomplished by replacing the fuze, the obturating ring, range adjustment plugs, the ignition cartridge, dud plugs, and the breech plug. The round is designed to be used at least 25 times (i.e., original firing plus 24 refurbishments). This item is code A: It has been type classified and has been approved for service use.</p> <p>JUSTIFICATION:</p> <p>This is a training-unique item; not used in combat. Use of the M766 will reduce training costs and environmental impacts while expanding the training environment by allowing soldiers to train in locations other than full ranges or ranges used for firing full range service rounds. The FY99 procurement supports annual peacetime training requirements and build toward authorized depot level for training unique ammunition.</p> <p>Type classification date: JUN 93 Acquisition manager: PM MORTARS</p>								

AMMUNITION COST ANALYSIS									
APPROPRIATION/BUDGET ACTIVITY:						DATE:			
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION						February 1997			
CTG, MORTAR, 60MM, 1/10 PRAC, M766 (E72000)						1310-01-216-2706 (B645)			
ELEMENT OF COST	FY96		FY97		FY98		FY99		TOTAL
	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	
HARDWARE									
1. COMPLETE ROUND	4,849	81.39	395	82.53	633	86.22	2,490	86.22	215
2. REFURBISH KITS	116,376	17.84	2,076	18.09	3,329	18.90	59,760	18.90	1,130
SUBTOTAL			2,471		3,962				1,345
PROCUREMENT SUPPORT									
1. ENGINEERING SUPPORT			861		975				1,043
2. QUALITY ASSURANCE			217		228				238
3. PROOF & ACCEPTANCE			32		49				51
4. INTERIM TRANSPORTATION			0		0				0
SUBTOTAL			1,110		1,252				1,332
NON-RECURRING COSTS									
SUBTOTAL									
TOTAL P-1 LINE ITEM		738.50	3,581	680.15	5,214	1075.10			2,677

BUDGET PROCUREMENT HISTORY AND PLANNING						DATE: February 1997				
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: CTG, MORTAR, 60MM, 1/10 PRAC, M766 (E72000)							
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPEC AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
1. COMPLETE ROUND										
FY96	UNKNOWN	OPT	TACOM	Mar 97	Nov 98	4,849	81.39			
FY97	UNKNOWN	OPT	TACOM	Mar 97	Apr 99	7,666	82.53	YES	NO	
FY99	UNKNOWN	C/FP	TACOM	Mar 99	Jun 00	2,490	86.22		NO	
2. REFURBISH KITS										
FY96	UNKNOWN	OPT	TACOM	Mar 97	Nov 98	116,376	17.84			
FY97	UNKNOWN	OPT	TACOM	Mar 97	Apr 99	183,984	18.09	YES	NO	
FY99	UNKNOWN	C/FP	TACOM	Mar 99	Jun 00	59,760	18.90		NO	
REMARKS: Award of FY95 contract with FY96 option delayed pending successful completion of first article test on initial (FY93) contract. FY96 and FY97 requirements will be awarded at the same time as FY95 basic contract.										

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1092

P-1 ITEM NOMENCLATURE

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

PROCUREMENT LEAD TIME (MONTHS)				
	ADMIN LEAD TIME		PROD	TOTAL AFTER 1 OCT
	BEFORE 1 OCT	AFTER 1 OCT		
INITIAL	6	6	18	24
REORDER	3	6	15	21

REMARKS:

FY96 & FY97 options will be produced without break in production.

Quantity in thousands.

FACIL. NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after Day
		Minimum Sust	18.5 Maximum	
1	POCAL INDUSTRIES, PA.	1	2 3	
2	UNKNOWN	1	2 3	

BUDGET ITEM JUSTIFICATION RECORD							DATE:	
APPROPRIATION/BUDGET ACTIVITY:		P-1 ITEM NOMENCLATURE:						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG, MORTAR, 60MM, ILLUM, M721/XM767 (E70400)						
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	52	28	0	0	0	0	0	0
COST (IN MILLIONS)	\$22.4	\$13.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
DESCRIPTION: <p>The 60MM Mortar Illuminating cartridge is designed for use with the M224 lightweight company mortar system (LWCMS) in all light infantry battalions including Airborne, Air Assault and Ranger. The M721 will provide illuminating capability at the same effective range as the companion High Explosive (HE) Cartridges, M720 (Range 3,200-3,800 Meters Maximum). This is triple the range of the ammunition it replaces. The HE and Illum Cartridges are ballistically similar, thus allowing a gun to illuminate and fire on the same target without adjustments. The FY96 and FY97 Procurements will include both white light and Infrared Illuminant. This Item is Code A; it is Type Classified (TC) and has been approved for service use.</p>								
JUSTIFICATION: <p>The FY97 procurement meets the annual peacetime training requirements and builds a war reserve stockpile in support of fielded Mortar Weapons. Impact of failure to procure will be continued reliance upon the old 60MM Illumination Round, thus forfeiting the benefit of the M721's increased range which contributes to troop survivability.</p>								
Type classification date: white light SEP 87; infrared MAR 97 Acquisition manager: PM MORTARS								

AMMUNITION COST ANALYSIS

APPROPRIATION/BUDGET ACTIVITY:

DATE:

February 1997

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG, MORTAR, 60MM, ILLUM, M721/XM767 (E70400)

1310-01-258-8689 (B647)

ELEMENT OF COST	FY96 QTY = 52,076		FY97 QTY = 27,580		FY98 QTY = 0		FY99 QTY = 0	
	QTY (EA)	UNIT COST	TOTAL	QTY (EA)	UNIT COST	TOTAL	QTY (EA)	UNIT COST
HARDWARE								
1. CTG.M721.LAP	19,366	165.00	3,195	7,790	161.27	1,256		
2. CTG.XM767.LAP	32,710	205.23	6,713	19,790	200.59	3,970		
3. PROP CHG M204	216,636	6.45	1,397	114,733	5.01	575		
4. IGN CTG M702	54,159	11.06	599	28,683	13.01	373		
5. FUZE, M776 MTSQ	54,159	124.06	6,719	28,683	126.77	3,636		
6. FIN M27	54,159	4.66	252	28,683	6.23	179		
SUBTOTAL			18,875			9,989		
PROCUREMENT SUPPORT								
1. ENGINEERING SUPPORT			1,007			1,995		
2. QUALITY ASSURANCE			526			360		
3. PROOF & ACCEPTANCE			302			169		
4. INTERIM TRANSPORTATION			82			54		
SUBTOTAL			1,917			2,578		
NON-RECURRING COSTS								
1. FIRST ARTICLE/IPT			1,586			572		
2. Calibration Lot								
SUBTOTAL			1,586			572		
TOTAL P-1 LINE ITEM		429.72	22,378		476.40	13,139		

BUDGET PROCUREMENT HISTORY AND PLANNING										DATE:
APPROPRIATION/BUDGET ACTIVITY:										February 1997
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										P-1 ITEM NOMENCLATURE:
										CTG, MORTAR, 60MM, ILLUM, M721/XM767 (E70400)
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
1. CTG.M721.LAP FY96	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	TACOM	Sep 96	Mar 98	19,366	165.00	YES	NO	
FY97	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	TACOM	Mar 97	Oct 98	7,790	161.27	YES	NO	
2. CTG.XM767.LAP FY96	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	TACOM	Sep 96	Jun 98	32,710	205.23	NO	YES	Mar 97
FY97	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	TACOM	Mar 97	Sep 98	19,790	200.59	NO	YES	Mar 97
3. PROP CHG M204 FY96	LOCKHEED MARTIN (MILAN AAP) MILAN, TN	SS/CPAF	IOC	Jun 96	Jul 97	216,636	6.45	YES	NO	
3A. PROP CHG M204A1 FY97	UNKNOWN	C/FP	TACOM	Jun 97	Mar 98	114,733	5.01		NO	
4. IGN CTG.M702 FY96	LOCKHEED MARTIN (MILAN AAP) MILAN, TN	SS/CPAF	IOC	Sep 96	Mar 97	54,159	11.06	YES	NO	
FY97	UNKNOWN	C/FP	TACOM	Jun 97	Mar 98	28,683	13.01		NO	
REMARKS: Pine Bluff Arsenal is a government owned / government operated (GOGO) facilities. Work is performed through work orders, not contracts.										

BUDGET PROCUREMENT HISTORY AND PLANNING						DATE: February 1997				
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: CTG, MORTAR, 60MM, ILLUM, M721/XM767 (E70400)							
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
5. FUZE, M776 MTSQ FY96	DIEHL GMBH SCHRAMBERG, GER	SS/FP	IOC	Jul 96	Jan 97	23,978	0.00	YES	NO	
FY96	DIEHL GMBH SCHRAMBERG, GER	OPT	IOC	Sep 96	Mar 97	30,181	0.00	YES	NO	
FY97	DIEHL GMBH SCHRAMBERG, GER	OPT	IOC	Mar 97	Sep 97	24,245	0.00	YES	NO	
FY97	DIEHL GMBH SCHRAMBERG, GER	SS/FP	TACOM	Jun 97	Nov 97	4,438	.00	YES	NO	
6. FIN M27 FY96	WILKINSON MFG CO Ft CALHOUN NE	C/FP	IOC	Sep 96	Mar 97	54,159	4.66	YES	NO	
FY97	UNKNOWN	C/FP	TACOM	May 97	Nov 97	28,683	6.23	YES	NO	
REMARKS: Sole source to Diehl due to expertise and non-availability of a U.S. produced mortar time fuze.										

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1092

DATE: February 1997

REQUIREMENTS CONTROL SYMBOL

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG, MORTAR, 60MM, ILLUM, M721/XM787 (E70400)

FACIL. NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after D day
		Minimum	Maximum	
1	PINE BLUFF ARSENAL, AR	8	20	35
2	DIEHL GMBH FRG	15	30	90

	PROCUREMENT LEAD TIME (MONTHS)					TOTAL
	BEFORE	ADMIN LEAD TIME		PROD	AFTER	
		1 OCT	1 OCT			
INITIAL	6	6	6	21	27	
REORDER	3	6	6	18	24	

REMARKS:	DIEHL produces fuzes for other customers than USG
*Quantities in thousands	

REMARKS:

DIEHL produces fuzes for other customers than USG.

Quantities in thousands

INITIAL	PROCUREMENT LEAD TIME (MONTHS)					TOTAL AFTER 1 OCT
	BEFORE		ADMIN LEAD TIME		PROD	
	1 OCT	AFTER 1 OCT	BEFORE	AFTER 1 OCT		
6	6	6	6	21	27	

FACIL. NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after D. day
		Minimum Sustl	1.8.5 Maximum	
1	PINE BLUFF ARSENAL, AR	6	20 35	
2	DIEHL GMBH FRG	15	30 90	

REQUIREMENTS CONTROL SYMBOL

P.1 ITEM NOMENCLATURE

CTG, MORTAR, 60MM, ILLUM, M721/XM767 (E70400)

PROCUREMENT LEAD TIME (MONTHS)					
	BEFORE 1 OCT	ADMIN LEAD TIME		PROD 1 OCT	TOTAL AFTER 1 OCT
		AFTER 1 OCT	6		
INITIAL	7	6	6	16	24
REORDER	6	6	6	16	22

REMARKS:

DIEHL produces fuzes for other customers than USG

Quantities in thousands

FACIL NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after D day
		Minimum Sust	1.8.5 Maximum	
1	PINE BLUFF ARSENAL, AR	6	20 35	
2	DIEHL GMBH FRG	15	30 90	

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 2.

P-1 ITEM NOMENCLATURE

CTG MORTAR 60MM SMOKE WP M722

(E70500)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 1	FY
QUANTITY (THOUSANDS)	-0-	-0-	23	-0-	-0-	-0-	-0-/-0-
COST (In Millions)	\$ -0-	\$ -0-	\$ 4.7	\$ -0-	\$ -0-	\$ -0-	\$ -0-/-0-

DESCRIPTION:

The M722, 60MM WP Smoke Cartridge is used on the M224 Lightweight Company Mortar System (LWCMS). It provides a smoke cloud for spotting or marking a target area. The M722 is assembled with the M745 Point Detonating Fuze which functions on impact. The cartridge has an integral burster charge, white phosphorous filler, a thin wall shell, fin assembly, a four increment M204 propelling charge, and an ignition cartridge. The operating range is from 70 to 3,490 meters. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

The need for a LWCMS resulted from an operational requirement for a lightweight mortar to enhance the firepower and mobility of small infantry units, and to increase the combat effectiveness of these units in scenarios where man-portability is essential. The requirements established a need to retain most of the capabilities of the standard 81MM Mortar, but with greatly reduced weight, and improved portability and ease of handling. FY 98 procurement builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION .DATE:

September 1991

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM11000000

DATE: SEPTEMBER 1996
NSN = 1310-01-336-1364
(E705000)P-1 ITEM NOMENCLATURE:
CTG MORTAR 60MM SMOKE WP M722APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

		FY 96	(QTY)	UNIT COST	TOTAL	FY 97	(QTY)	UNIT COST	TOTAL	FY 98	(QTY)	UNIT COST	TOTAL	FY 99	(QTY)	UNIT COST	TOTAL
ELEMENT OF COST		QTY															
QM: EACH																	TOTAL
HARDWARE																	
1. LOAD ASSEMBLY, AND PACK (LAP)																	1924
2. PROJ MPTS																	362
3. FIN ASSY M27																	131
4. LAP CHG PROP M204																	90
5. CONTAINER ASSY M204																	166
6. NITROCELLULOSE WW GR A (LB)																	3
7. LAP CTG IGN M702																	215
8. M9 FLAKE .006 (LB)																	11
9. M10 FLAKE .008 (LB)																	36
10. DET STAB M61																	55
11. DET STAB M55																	9
12. M85 BURSTER																	108
13. LAP FZ M745																	51
14. FZ MPTS M745																	945
15. COMP A-5, CLASS 1 (LB)																	3
16. PXN-5 TYPE I, CLASS 3 (LB)																	1
SUBTOTAL																	4110
PRODUCTION SUPPORT																	
1. PRODUCTION ENGINEERING																	420
2. QUALITY ASSURANCE																	10
3. ACCEPTANCE TESTING																	47
4. INTERIM TRANSPORTATION																	30
5. INDUSTRIAL STOCK SUPPORT																	145

P-1 ITEM NO. 15 PAGE NO. 2 of 11

EXHIBIT P-5

RCS: DD-COMP (AR) - 1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1100C45

DATE: SEPTEMBER 1996
NSN = 1510-01-236-1354
(E70500)

P-1 ITEM NOMENCLATURE:
CTG MORTAR 60MM SMOKE WP M722

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

		FY 96	(QTY	)	FY 97	(QTY	)	FY 98	(QTY	)	23025)	FY 99	(QTY)
ELEMENT OF COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST
QM: EACH														
SUBTOTAL														
NONRECURRING														
1.*GOVERNMENT FURNISHED MATERIAL														
SUBTOTAL														

TOTAL P-1 LINE ITEM!														

PCN PO2QM1DOD4Z

DATE: SEPTEMBER 1996

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1310-01-236-1354

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION P-1 ITEM NOMENCLATURE CTG MORTAR 60MM SMOKE WP M722 (E70100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1998	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	IOC	DEC 97	SEP 99	23025	83.55	YES	NO	
2. PROJ MPTS										
FY 1998	TBS	C/FP	IOC	JAN 98	SEP 98	23946	15.13	YES	NO	
3. FIN ASSY M27										
FY 1998	TBS	C/FP	IOC	JAN 98	SEP 98	23946	5.48	YES	NO	
4. LAP CHG PROP M204										
FY 1998	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 98	OCT 98	94403	0.96	YES	NO	
5. CONTAINER ASSY M204										
FY 1998	ARMTEC DEFENSE PROD COACHELLA, CA	SS/FP	IOC	JAN 98	SEP 98	94403	1.75	YES	NO	

REMARKS:

TBS - To Be Selected

PCN PO2QM1DOD4Z

DATE: SEPTEMBER 1996

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1310-01-236-1354

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 60MM SMOKE WP M722

(E70300)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
6. NITROCELLULOSE WW GR A (LB)										
FY 1998	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	APR 98	JUL 98	760	4.04	YES	NO	
7. LAP CTG IGN M702										
FY 1998	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 98	OCT 98	23946	8.97	YES	NO	
8. M9 FLAKE .006 (LB)										
FY 1998	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	APR 98	JUL 98	185	57.92	YES	NO	
9. M10 FLAKE .008 (LB)										
FY 1998	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	APR 98	JUL 98	1842	19.60	YES	NO	

REMARKS:

P-1 ITEM NO. 15 PAGE NO. 5 of 11

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: SEPTEMBER 1996

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1310-01-236-1354

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 60MM SMOKE WP M722

(E70500)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL. NOW	SPEC REV REQD	IF YES WHEN AVAIL.
10. DET STAB M61										
FY 1998	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	JAN 98	SEP 98	24177	2.26	YES	NO	
11. DET STAB M55										
FY 1998	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	JAN 98	SEP 98	23716	0.38	YES	NO	
12. M85 BURSTER										
FY 1998	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 98	OCT 98	23716	4.57	YES	NO	
13. LAP FZ M745										
FY 1998	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 98	APR 99	23716	2.16	YES	NO	

REMARKS:

PCN PO2QM1DOD4Z

DATE: SEPTEMBER 1996

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1310-01-236-1354

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION P-1 ITEM NOMENCLATURE CTG MORTAR 60MM SMOKE WP M722 (E70500)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
14. FZ MPTS M745 **										
FY 1998 TBS		C/FP	IOC	APR 98	MAR 99	23946	39.45	YES	NO	
15. *COMP A-5, CLASS 1 (LB)										
FY 1998 STOCK ISSUE		N/A	N/A	N/A	N/A	196	N/A	N/A	N/A	
16. PBXN-5 TYPE I, CLASS 3 (LB)										
FY 1998 HOLSTON DEFENSE CORP KINGSPORT, TN		SS/CPFF	IOC	JAN 98	JUL 98	7	83.06	YES	NO	

REMARKS:

** PACING COMPONENT
TBS - To Be Selected

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE	FEBRUARY 1997
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REQUIREMENTS CONTROL SYMBOL
AND COMPLAINTS

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE
CTG MORTAR 60MM SMOKE WP M722

BRAND 1 777

E70500

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO DELIVER	
		MINIMUM QUANTITY	1955 MAXIMUM	REACTOR MAX. MONTHS	MAX. DELIVERY
1	MILAN AAP MILAN, IN	0.00	40.00	100.0	0
2	PINE BLUFF ARSENAL	10.00	50.00	150.0	0
3	ALLIANT TECH	0.00	5.00	5.00	0
4	TO BE SELECTED	0.00	5.00	5.00	0

PROCUREMENT LEAD TIME			
ADMIN. LEAD TIME	ASSEMBLY	PHOD	TOTAL
MONTHS	MONTHS	MONTHS	MONTHS
6	3	21	24
INITIAL			
REORDER			

PACING COMPONENT				TOTAL
UALT	ALT	FDN		
6	6	12	18	
INITIAL				
REORDER				

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1967

REQUIREMENTS CONTROL SYMBOL

1

P-1 ITEM NOMENCLATURE

APPROPRIATION/BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FISCAL YEAR		FISCAL YEAR
CIG PURTAR 60MM SHORE WP H722		E70500

FISCAL YEAR

FISCAL YEAR

E709

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION VOLUME	PRODUCTION RATES	MONTHS TO REACH MAX AFTER DAY
		1000	1000	
		MINIMUM	1000	
		SUST	MAXIMUM	
1	MILAN A.P. MILAN, IN	0.00	40.00	100.0
2	PINE BLUFF ARSENAL	10.00	50.00	150.0
3	ALLIANT TECH	0.00	5.00	5.00
4	TO BE SELECTED	0.00	5.00	5.00

	PROCUREMENT LEAD TIME			TOTAL AFTER 1 OCT
	BEFORE 1 OCT	AFTER 1 OCT	PROD.	
INITIAL	6	3	21	24
REORDER	6	3	21	24

	PACING COMPONENT				TOTAL
	UALT	ALT	PDN	PDN	
INITIAL	6	6	12		18
REORDER	6	6	12		18

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 60MM HE M720

(E67303)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	58	-0-	-0-	-0-	58	31/30	
COST (In Millions)	\$ -0-	\$ 10.0	\$ -0-	\$ -0-	\$ -0-	\$ 11.1	\$ 6.2/6.0	

DESCRIPTION:

The 60mm M720 high explosive (HE) cartridge utilizes the M734 multi-option fuze (MOF) and is the primary HE round for the M224 Light Weight Company Mortar System. The MOF can be set for proximity, near-surface burst, point detonation, or delay detonation. The cartridge is designed to be used against enemy personnel either in the open, or in foxholes, light vehicles, and light bunkers. This item is Code A, approved for service use. This item is fixed standard priced and procured through the CAWCF.

JUSTIFICATION:

This is a training standard item used in both training and combat. Procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1977

RCS: DD-COMP (AR) -1092

PCN: P02QM1DOC4Z

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

DATE: FEBRUARY 1997
NSN = 1310-01-022-7680
(E67303)

APPROPRIATION BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 60MM HE M720

ELEMENT OF COST QM: EACH	FY 96		FY 97		FY 98		FY 99		UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
	QTY	(QTY	QTY	(QTY	QTY	(QTY	QTY	(QTY						
HARDWARE														
1. LOAD ASSEMBLY, AND PACK (LAP)			57648	14.35					827					
2. *PROJ M720 MPTS			59954	9.15					549					
3. *COMP B TYPE I														
GRADE A (LB)			46119	1.39					64					
4. *TNT TYPE I,														
FLAKE (LB)			23060	1.26					29					
5. FIN ASSY M27			59954	9.63					578					
6. LAP CTG IGN														
M702			59954	7.35					440					
7. M9 FLAKE .006														
(LB)			462	72.13					33					
8. NITROCELLULOSE														
WW GR A (LB)			1903	9.53					18					
9. M10 FLAKE .008														
(LB)			4612	19.53					90					
10. LAP CHG PROP														
M204			232898	0.76					176					
11. CONTAINER ASSY														
M204			232898	1.99					462					
12. LAP FUZE MO														
M734			59378	1.70					101					
13. FZ MO M734 MPTS			59954	86.62					5193					
14. DET STAB M61			60531	1.38					83					
15. HMX GRADE B														
CLASS 3 (LB)			260	87.59					23					
16. COMP A-5, CLASS														
1 (LB)			3229	12.54					40					
17. RDX TYPE II,														
CLASS 3 (LB)			87	12.75					1					
18. BEXN-5 TYPE I,														
CLASS 3 (LB)			18	60.83					1					
SUBTOTAL									8708					

RCS: DD-COMP (AR) - 1092

PCN: P02QM1DOC4Z

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

DATE: FEBRUARY 1997
NSN = 1310-01-022-7680
(E67303)

P-1 ITEM NOMENCLATURE:
CTG MORTAR 60MM HE M720

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

		FY 96	(QTY	)	FY 97	(QTY	)	57648	FY 98	(QTY	)	FY 99	(QTY)
ELEMENT OF COST		QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
QM: EACH														
PRODUCTION SUPPORT														
1.PRODUCTION ENGINEERING								399						
2.QUALITY ASSURANCE								12						
3.ACCEPTANCE TESTING								95						
4.INTERIM TRANSPORTATION								83						
5.INDUSTRIAL STOCK SUPPORT								346						
6.CAWCF GAIN/LOSS SURCHARGE								990						
SUBTOTAL								1925						
NONRECURRING														
1.*GOVERNMENT FURNISHED MATERIAL								-642						
SUBTOTAL								-642						
*****								*****						
TOTAL P-1 LINE ITEM								173.31						
								9991						

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1310-01-022-7680

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION P-1 ITEM NOMENCLATURE CTG MORTAR 60MM HE M720 (E67303)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1997 MARTIN MARIETTA MILAN, TN		SS/CPAF	IOC	APR 97	SEP 98	57648	14.35	YES	NO	
2. *PROJ M720 MPTS										
FY 1997 STOCK ISSUE		N/A	N/A	N/A	N/A	59954	N/A	N/A	N/A	
3. *COMP B TYPE I GRADE A (LB)										
FY 1997 STOCK ISSUE		N/A	N/A	N/A	N/A	46119	N/A	N/A	N/A	
4. *TNT TYPE I, FLAKE (LB)										
FY 1997 STOCK ISSUE		N/A	N/A	N/A	N/A	23060	N/A	N/A	N/A	
5. FIN ASSY M27										
FY 1997 TBS		C/FP	IOC	OCT 97	APR 98	59954	9.63	YES	NO	

REMARKS:

TBS - To Be Selected

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

NSN = 1310-01-022-7680

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG MORTAR 60MM HE M720

(E67303)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
6. LAP CTG IGN M702										
FY 1997	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	APR 97	MAR 98	59954	7.35	YES	NO	
7. M9 FLAKE .006 (LB)										
FY 1997	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	OCT 97	JUL 98	462	72.13	YES	NO	
8. NITROCELLULOSE WW GR A (LB)										
FY 1997	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	OCT 97	JUN 98	1903	9.53	YES	NO	
9. M10 FLAKE .008 (LB)										
FY 1997	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	OCT 97	AUG 98	4612	19.53	YES	NO	

REMARKS:

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1310-01-022-7680

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG MORTAR 60MM HE M720

(E67303)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
10. LAP CHG PROP M204										
FY 1997	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	APR 97	JUL 98	232898	0.76	YES	NO	
11. CONTAINER ASSY M204										
FY 1997	ARMTEC DEFENSE PROD COACHELLA, CA	C/FP	IOC	OCT 97	APR 98	232898	1.99	YES	NO	
12. LAP FUZE MO M734										
FY 1997	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	OCT 97	JUL 98	59378	1.70	YES	NO	
13. FZ MO M734 MPTS **										
FY 1997	TBS	C/FP	IOC	JUN 97	JUN 98	59954	86.62	YES	NO	
14. DET STAB M61										
FY 1997	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	MAR 97	SEP 97	60531	1.38	YES	NO	

REMARKS:

** PACING COMPONENT
TBS - To Be Selected

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

NSN = 1310-01-022-7680

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG MORTAR 60MM HE M720

(E67303)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
15. HMX GRADE B, CLASS 3 (LB)										
FY 1997	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	JAN 97	JUL 97	260	87.59	YES	NO	
16. *COMP A-5, CLASS 1 (LB)										
FY 1997	STOCK ISSUE	N/A	N/A	N/A	N/A	3229	N/A	N/A	N/A	
17. RDX TYPE II, CLASS 3 (LB)										
FY 1997	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	MAR 97	AUG 97	87	12.75	YES	NO	
18. PBXN-5 TYPE I, CLASS 3 (LB)										
FY 1997	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	MAR 97	JUL 97	18	60.83	YES	NO	

REMARKS:

BUDGET ITEM JUSTIFICATION SHEET

DATE

February 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 81MM ILLUM M853A1

(E76100)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (THOUSANDS)	-0-	-0-	-0-	23	17	18	18	18
COST (In Millions)	\$ -0-	\$ -0-	\$ -0-	\$ 11.8	\$ 8.6	\$ 9.7	\$ 9.9	\$ 10.1

DESCRIPTION:

The M853A1, Illumination Cartridge is an improved illumination round for use in the M252, 81MM Mortar System. The cartridge has a range of 5,150 meters to burst, 72% greater than the standard M301A3 round, and will illuminate out to the full range of the M821 and M889, High Explosive (HE) cartridges (5,600 meters). The M853A1, Illumination Cartridge will illuminate an area 207% greater than the M301A3. The M772, MTSQ Fuze used on this round will result in increased accuracy. The payload consists of a parachute and improved candle, which is ignited and base ejected as an aerial event upon functioning of the M772, MTSQ Fuze, 475 meters above the ground. The candle provides illumination for 50 seconds minimum at 525,000 candlepower. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

The FY 99 and subsequent procurements are to support War Reserve and training levels as the older M301A3 are consumed in training by the end of FY 99.

TYPE CLASSIFICATION DATE:

September 1991

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1315-01-289-9789

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 81MM ILLUM M853A1

(E76100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1999	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	IOC	DEC 98	SEP 00	23315	251.77			
2. PROP CHG M219										
FY 1999	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 99	JUN 00	95592	1.68			
3. CONTAINER ASSY										
FY 1999	ARMEC DEFENSE PROD COACHELLA, CA	SS/FP	IOC	MAR 99	MAR 00	95592	2.07			
4. NITROCELLULOSE WW GR A (LB)										
FY 1999	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	JUN 99	DEC 99	1586	4.12			

REMARKS:

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1315-01-289-9789

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG MORTAR 81MM ILLUM M853A1

(E76100)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
5. IGN CTG M752A1										
FY 1999	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 99	JUN 00	24248	14.29			
6. M9 FLAKE .010 (LB)										
FY 1999	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	JUN 99	DEC 99	544	49.53			
7. FZ M772 **										
FY 1999	JUNGHANS SCHRAMBERG, GERMANY	SS/FP	IOC	MAR 99	JUL 00	24248	146.44			

REMARKS:

** PACING COMPONENT

P-1 ITEM NO. 17 PAGE NO. 4 of 6

EXHIBIT P-5A

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1092

DD-COMP (AR) 1092

E76100

001017

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO AFTER D-DAY
		MINIMUM SUST.	1-8-5 MAXIMUM	
1	PINE BLUFF, AR	9.00	35.00	87.00 0
2	JUNGHANS, GERMANY	15.00	35.00	87.00 0

REMARKS	PROCUREMENT LEAD TIME				PACING COMPONENT	TOTAL
		ADMIN LEADTIME		TOTAL AFTER 1 OCT		
		PRIOR 1 OCT	AFTER 1 OCT			
INITIAL	6	6	21	27	6	16 22
	6	6	12	18	6	12 18
REORDER	6	3	21	24		

QUANTITY IN THOUSANDS
FY 99 DELIVERIES WILL BE IN DEC 2000.

	PROCUREMENT LEAD TIME		
	PRIOR 1 OCT	AFTER 1 OCT	TOTAL AFTER 1 OCT
INITIAL	6	6	27
REORDER	6	3	24

[illegible]

QUANTITY IN THOUSANDS

[illegible]

BUDGET ITEM JUSTIFICATION SHEET

DATE FEBRUARY 1997						
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE				
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG MORTAR 81MM SMOKE RP M819 (E76200)				
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
QUANTITY (THOUSANDS)	-0-	-0-	-0-	24	30	19
COST (In Millions)	\$ -0-	\$ -0-	\$ -0-	\$ 10.7	\$ 13.3	\$ 8.7
						\$ 9.0/9.2

DESCRIPTION:

The M819 RP Smoke Cartridge is an improved ground screening round for use with the M252 I81mm Mortar System. This improved smoke cartridge provides an effective obscuring screen up to 93% of the maximum range of the M821 and M889 81mm High Explosive (HE) cartridges (5,600 meters). The payload consists of 28 red phosphorous (RP) wedges, which are ignited and base ejected upon functioning of the M772 Mechanical Time Super Quick (MTSQ) fuze, 175 meters above the ground. Three rounds will provide effective ground screening for a duration of five minutes under ideal conditions. The M819 is three to eight times more effective than the currently fielded M375A3 White Phosphorous (WP) Smoke Cartridge, without the storage, handling and logistics restrictions associated with WP cartridges. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

The FY 99 and subsequent procurements are to support war reserve and training levels as the older M375 series white phosphorous cartridges will be consumed in yearly training by the end of FY 99.

TYPE CLASSIFICATION DATE:

September 1991

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1315-01-199-8688

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG MORTAR 81MM SMOKE RP M819

(E76200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1999	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	IOC	DEC 98	SEP 00	24287	197.38			
2. FZ M772 **										
FY 1999	JUNGHANS SCHRAMBERG, GERMANY	SS/FP	IOC	MAR 99	JUL 00	25259	146.44			
3. PROP CHG M218										
FY 1999	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 99	JUN 00	99577	1.65			
4. CONTAINER ASSY										
FY 1999	ARMTEC DEFENSE PROD COACHELLA, CA	SS/FP	IOC	MAR 99	MAR 00	99577	2.07			
5. NITROCELLULOSE WW GR A (LB)										
FY 1999	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	JUN 99	DEC 99	1652	4.12			

REMARKS:

** PACING COMPONENT

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG MORTAR 81MM SMOKE RP M819

NSN = 1315-01-199-8688

(E76200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
6. IGN CTG M752A1										
FY 1999	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JAN 99	JUN 00	25259	14.29			
7. M9 FLAKE .010 (LB)										
FY 1999	ALLIANT TECH SYS RADFORD, VA	SS/FP	IOC	JUN 99	DEC 99	566	49.53			

REMARKS:

P-1 ITEM NO. 18

PAGE NO. 4 of 6

EXHIBIT P-5A

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 81MM PRAC 1/10 RANGE M880

(E19800)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	18	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 6.6	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION:

The M880 81mm mortar cartridge is a low-cost, short range, refurbishable practice round that will replace a majority of the standard High Explosive (HE) rounds used in the 81mm mortar training strategy. It consists of an M775 point detonating fuze, a ductile cast-iron body which approximates the shape of the 81mm HE service round, and an ignition cartridge which provides the limited propulsion requirement. After firing, the round is retrieved and refurbished. Refurbishment will be accomplished by placing the fuze, the obturating ring, range adjustment plugs, the ignition cartridge, and the breech plug. The round is designed to be used 20 times (i.e., original firing plus 19 refurbishments). This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training-unique item, not used in combat. Use of the M880 will expand the training environment by allowing soldiers to train in locations other than full ranges. Procurement supports annual peacetime requirements. If not produced, the high explosive rounds would have to be used in training, resulting in higher training costs.

TYPE CLASSIFICATION DATE:

1986

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QM1DOC4Z

DATE: FEBRUARY 1997
NSN = 1315-01-216-7071
(E19800)P-1 ITEM NOMENCLATURE:
CTG MORTAR 81MM PRAC 1/10 RANGE M880APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ELEMENT OF COST QM: EACH	FY 96		FY 97		FY 98		FY 99		TOTAL	UNIT COST	QTY	UNIT COST	QTY	TOTAL	UNIT COST	QTY	TOTAL
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST									
HARDWARE																	
1. LOAD, ASSEMBLE, AND PACK (LAP)	17620	42.07	741														
2. REFURBISH KITS	334780	13.19	4415														
SUBTOTAL			5156														
PRODUCTION SUPPORT																	
1. PRODUCTION ENGINEERING			160														
2. QUALITY ASSURANCE			7														
3. ACCEPTANCE TESTING			59														
4. INTERIM TRANSPORTATION			20														
5. INDUSTRIAL STOCK SUPPORT			219														
6. CAWCF GAIN/LOSS SURCHARGE			943														
SUBTOTAL			1408														
TOTAL P-1 LINE ITEM			6564														

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1315-01-216-7071

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG MORTAR 81MM PRAC 1/10 RANGE M880

(E19800)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996 TBS		C/FP	IOC	MAR 98	MAR 99	17620	42.07			
2. REFURBISH KITS										
FY 1996 TBS		C/FP	IOC	MAR 98	MAR 99	334780	13.19			

REMARKS:

TBS - To Be Selected

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1092

APPROPRIATION/BUDGET ACTIVITY

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1: AMMUNITION

CTG MORTAR 81MM PRAC 1/10 RANGE M880

E19800

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REPLACE AFTER D-DAY
		MINIMUM SUST.	1-2-5 MAXIMUM	
1	TO BE SELECTED	3.00	4.00	10.00
				0

	PROCUREMENT LEAD TIME		
	PRIOR 1 OCT	ADMIN LEAD TIME AFTER 1 OCT	TOTAL AFTER 1 OCT
INITIAL	6	6	12
REORDER	6	6	12

REMARKS

QUANTITY IN THOUSANDS

BUDGET ITEM JUSTIFICATION RECORD							DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: CTG, MORTAR, 120MM, FR PRAC, M931 (E25507)					
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	37	127	59	77	95	95	68	47
COST (IN MILLIONS)	\$18.2	\$51.0	\$24.4	\$32.2	\$40.1	\$41.3	\$30.2	\$21.2
<p><u>DESCRIPTION:</u></p> <p>The M931 120mm mortar cartridge is a low-cost, full range, practice round that will replace a percentage of the standard High Explosive (HE) rounds used in the 120mm mortar training strategy. It consists of a M781 point detonating practice fuze which simulates the multi-option fuze and provides flash, bang and smoke; a steel body which approximates the shape of the 120mm HE service round; and an ignition cartridge which provides the propulsion requirement. This item is code A: It has been type classified and has been approved for service use. This round is produced from a performance specification.</p> <p><u>JUSTIFICATION:</u></p> <p>This is a training-unique item; not used in combat. Use of the M931 will reduce training costs and environmental impacts. The FY98 and FY99 procurements support annual peacetime training requirements and builds toward authorized depot level for training unique ammunition.</p> <p>Type classification date: TC (STD) AUG 96 Acquisition manager: PM MORTARS</p>								

AMMUNITION COST ANALYSIS

APPROPRIATION/BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG, MORTAR, 120MM, FR PRAC, M931 (E25507)

DATE:

February 1997

ELEMENT OF COST	FY96		FY97		FY98		FY99		QTY = 76,500	
	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST
HARDWARE										
1. Modified System Contract, M931	37,175	276.79	10,290	253.88	32,116	114.98	6,727	117.40	8,981	117.40
1a. LAP M931	38,662	106.92	4,134	101.20	13,314	109.46	6,660	124.30	9,889	124.30
2. SHELL BODY						60,840	2,355	39.51	3,144	39.51
3. FIN ASSEMBLY M34						239,850	3,185	13.56	4,253	13.56
4. PROP CHARGE M233						60,840	1,612	27.04	2,151	27.04
5. IGNITION CTG M1005						60,840	1,483	25.10	1,997	25.10
6. FUZE TRNG M781										
SUBTOTAL			14,424	402.78	45,430	401.18	22,022	420.38	30,415	420.38
PROCUREMENT SUPPORT										
1. ENGINEERING SUPPORT			1,073		1,096		773		787	
2. QUALITY ASSURANCE			315		386		148		227	
3. PROOF & ACCEPTANCE			244		864		331		425	
4. INTERIM TRANSPORTATION			42		143		195		305	
SUBTOTAL			1,674		2,489		1,447		1,744	
NON-RECURRING COSTS										
1. First Article			2,146		1,596		0			
2. Production Verification Test					1,437		0			
3. Calibration Lot					3,032		0			
SUBTOTAL			2,146		50,952		23,469		32,159	
TOTAL P-1 LINE ITEM		490.76	18,244	402.78	50,952	401.18	23,469	420.38	32,159	420.38

DD FORM 2448, AUG 89

P-1 ITEM NO 20

PAGE NO. 2 OF 6 PAGES

Exhibit P-5

BUDGET PROCUREMENT HISTORY AND PLANNING						DATE: February 1997				
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: CTG, MORTAR, 120MM, FR PRAC, M931 (E25507)							
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
<u>1. Modified System Contract M931</u>										
FY96	POCAL INDUSTRIES MOSCOW, PA	SS/FP	TACOM	Feb 97	Aug 98	37,175	276.79	YES		
FY97	POCAL INDUSTRIES MOSCOW, PA	OPT	TACOM	Feb 97	Oct 98	126,500	253.88	YES		
<u>1a. LAP M931</u>										
FY98	UNKNOWN	C/FP	TACOM	Mar 98	Sep 99	58,500	114.98	YES		
FY99	UNKNOWN	OPT	TACOM	Mar 99	Jun 00	76,500	117.40	YES		
<u>2. SHELL BODY</u>										
FY96	CHAMBERLAIN MFG. SCRANTON, PA	SS/FP	TACOM	Aug 96	Jun 97	38,662	106.92	YES		
FY97	CHAMBERLAIN MFG. SCRANTON, PA	OPT	TACOM	Mar 97	Jan 98	131,560	101.20	YES		
FY98	CHAMBERLAIN MFG. SCRANTON, PA	OPT	TACOM	Jan 98	Oct 98	60,840	109.46	YES		
FY99	CHAMBERLAIN MFG. SCRANTON, PA	OPT	TACOM	Jan 99	Oct 99	79,560	124.30	YES		
REMARKS: FY96/97 initial production is a combined buy sole source to the development contractor. All 120mm mortar shell bodies are produced on the same line. Sequence of production is arranged to minimize assembly line change over.										

BUDGET PROCUREMENT HISTORY AND PLANNING					DATE:					
APPROPRIATION/BUDGET ACTIVITY:					February 1997					
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION					P-1 ITEM NOMENCLATURE:					
					CTG, MORTAR, 120MM, FR PRAC, M931 (E25507)					
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES, WHEN AVAIL
<u>3. FIN ASSEMBLY M34</u>										
FY98	VALENTEC SYSTEMS, INC MT. ARLINGTON, NJ	OPT	TACOM	Mar 98	Dec 98	60,840	38.70	NO	YES	Mar 97
FY99	VALENTEC SYSTEMS, INC MT. ARLINGTON, NJ	OPT	TACOM	Jan 99	Oct 99	79,560	39.51			
<u>4. PROP CHARGE M233</u>										
FY98	UNKNOWN	OPT	TACOM	Mar 98	Jan 99	239,850	13.28	YES		
FY99	UNKNOWN	OPT	TACOM	Jan 99	Oct 99	313,650	13.56	YES		
<u>5. IGNITION CTG M1005</u>										
FY98	UNKNOWN	C/FP	TACOM	Mar 98	May 99	60,840	26.49	NO	YES	Mar 97
FY99	UNKNOWN	OPT	TACOM	Jan 99	Dec 99	79,560	27.04	NO	YES	Mar 97
<u>6. FUZE TRNG M781</u>										
FY98	UNKNOWN	C/FP	TACOM	Mar 98	Mar 99	60,840	24.38	YES		
FY99	UNKNOWN	OPT	TACOM	Jan 99	Oct 99	79,560	25.10	YES		
REMARKS:										
FY96/97 initial production is a combined buy sole source to the development contractor.										
All 120mm mortar shell bodies are produced on the same line. Sequence of production is arranged to minimize assembly line change over.										
DD FORM 2446-1 JUL 87					P-1 SHOPPING LIST					

[illegible]

The same line produces shell bodies for all 120mm mortar rounds. Sequence of production is arranged to minimize assembly line change over.

*Quantities in thousands

PROCUREMENT LEAD TIME (MONTHS)				
	ADMIN LEAD TIME		PROD	TOTAL AFTER 1 OCT
	BEFORE 1 OCT	AFTER 1 OCT		
INITIAL	6	6	18	24
REORDER	3	6	15	21

FACIL. NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after D day
		Minimum Sust.	18.5 Maximum	
1	POCAL INDUSTRIES, PA	10	15	40
2	UNKNOWN	10	20	40
3	CHAMBERLAIN MFG. PA	10	25	50

DATE:	February 1997	REQUIREMENTS CONTROL SYMBOL
		DD-COMP (AR) 1092

94 ITEM NONFISCAL

POST-ITEM NOMENCLATURE

CIG. MURTIAR, 120MM, FR PRAC, XM931 (E25507)

FACIL NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after D day
		Minimum	Maximum	
1	POCAL INDUSTRIES, PA	10	15	40
2	UNKNOWN	10	20	40
3	CHAMBERLAIN MFG, PA	10	25	50

Quantities in thousands

BUDGET ITEM JUSTIFICATION RECORD							DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: CTG, MORTAR, 120MM, HE/MO, M934A1 (E25501)					
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	0	0	32	32	24	0	0	0
COST (IN MILLIONS)	\$0.0	\$0.0	\$29.9	\$29.9	\$22.9	\$0.0	\$0.0	\$0.0
<p>DESCRIPTION:</p> <p>The round is used against personnel and materiel providing both fragmentation and blast effect. It consists of a multi-option fuze, tail assembly, and projectile body with a TNT or composition B explosive fill. The round uses a proximity fuze setting to burst at a height over the target which is optimized for lethality. The round expands the total range 1000 meters and has a blast effect 1.5 times greater than the 4.2-in high explosive round it replaces. The M934A1 version incorporates the more reliable and countermeasure resistant M734A1 Multi-option fuze. This item is code A; it has been approved for service use.</p> <p>JUSTIFICATION:</p> <p>This procurement is part of the total package fielding effort for the 120mm mortar system. Procurement supports annual peacetime training requirements and builds a war reserve inventory in accordance with the Army's procurement goals.</p> <p>Type Classification Date: NDI - MAR 90 limited procurement - urgent(LPU); Enhanced Ammunition - M934 standard (STD) MAY92; M934A1 standard (STD) JUN 96. Acquisition Manager: PM MORTARS</p>								

APPROPRIATION/BUDGET ACTIVITY: AMMUNITION COST ANALYSIS									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION									
CTG, MORTAR, 120MM, HE/MO, M934A1 (E25501)									
1315-01-335-5016 (C379)									
DATE: February 1997									
ELEMENT OF COST	FY96		FY97		FY98		FY99		TOTAL
	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	
HARDWARE									
1. LAP M934A1					32,499	178.99	31,502	184.37	5,808
2. SHELL BODY					33,799	122.26	32,762	137.68	4,511
3. FIN ASSEMBLY M31					33,799	39.60	32,762	40.43	1,325
4. IGNITION CTG M1020					33,799	26.49	32,762	27.04	886
5. PROP CHARGE M234					133,246	13.28	129,158	13.56	1,751
6. FUZE M734A1					33,799	312.33	32,762	319.65	10,472
7. PA153 CONTAINER					33,799	10.81	32,762	11.04	362
8. PA154 CONTAINER					16,899	39.12	16,381	39.96	655
SUBTOTAL									25,770
PROCUREMENT SUPPORT									
1. ENGINEERING SUPPORT									989
2. QUALITY ASSURANCE									301
3. PROOF & ACCEPTANCE									519
4. INTERIM TRANSPORTATION									266
NON-RECURRING COSTS									
First Article Test									2,075
Calibration Lot									2,043
SUBTOTAL									2,043
TOTAL P-1 LINE ITEM						920.27		948.77	29,888

BUDGET PROCUREMENT HISTORY AND PLANNING					DATE:					
APPROPRIATION/BUDGET ACTIVITY:					February 1997					
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION					P-1 ITEM NOMENCLATURE:					
					CTG, MORTAR, 120MM, HE/MO, M934A1 (E25501)					
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
1. <u>LAP M934A1</u>										
FY98	UNKNOWN	C/FP	TACOM	Mar 98	Dec 99	32,499	178.99	YES		
FY99	UNKNOWN	OPT	TACOM	Mar 99	Sep 00	31,502	184.37	YES		
2. <u>SHELL BODY</u>										
FY98	CHAMBERLAIN MFG SCRANTON, PA	OPT	TACOM	Jan 98	Jan 99	33,799	122.26	YES		
FY99	CHAMBERLAIN MFG SCRANTON, PA	OPT	TACOM	Jan 99	Jan 00	32,762	137.68	YES		
3. <u>FIN ASSEMBLY M31</u>										
FY98	VALENTEC SYSTEMS, INC MT. ARLINGTON, NJ	OPT	TACOM	Jan 98	Oct 98	33,799	39.60	YES		
FY99	VALENTEC SYSTEMS, INC MT. ARLINGTON, NJ	OPT	TACOM	Jan 99	Oct 99	32,762	40.43	YES		
4. <u>IGNITION CTG M1020</u>										
FY98	UNKNOWN	OPT	TACOM	Jan 98	Nov 98	33,799	26.49	YES		
FY99	UNKNOWN	OPT	TACOM	Jan 99	Nov 99	32,762	27.04	YES		
REMARKS:										
120mm components (M31fin, M1020 ignition cartridge, M734A1 fuze, PA153 container and PA154 container) are procured on same contracts as for other 120mm mortar rounds.										

BUDGET PROCUREMENT HISTORY AND PLANNING							DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY:		P-1 ITEM NOMENCLATURE:								
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG, MORTAR, 120MM, HE/MO, M934A1 (E25501)								
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
5. <u>PROP CHARGE M234</u>										
FY98	UNKNOWN	OPT	TACOM	Jan 98	Jan 99	133,246	13.28	YES		
FY99	UNKNOWN	OPT	TACOM	Jan 99	Jan 00	129,158	13.56	YES		
6. <u>FUZE M734A1</u>										
FY98	UNKNOWN	C/FP	TACOM	Mar 98	Apr 99	33,799	312.33	YES		
FY99	UNKNOWN	OPT	TACOM	Jan 99	Feb 00	32,762	319.65	YES		
7. <u>PA153 CONTAINER</u>										
FY98	OMEGA CONTAINER INC. ARCADIA, LA	OPT	TACOM	Mar 98	Sep 98	33,799	10.81	YES		
FY99	UNKNOWN	C/FP	TACOM	Mar 99	Sep 99	32,762	11.04	YES		
8. <u>PA154 CONTAINER</u>										
FY98	BROCKWAY STD ATLANTA, GA	OPT	TACOM	Mar 98	Sep 98	16,899	39.12	YES		
FY99	UNKNOWN	C/FP	TACOM	Mar 99	Sep 99	16,381	39.96	YES		
REMARKS: 120mm components (M31fin, M1020 ignition cartridge, M734A1 fuze, PA153 container and PA154 container) are procured on same contracts as for other 120mm mortar rounds.										

[illegible]

	PROCUREMENT LEAD TIME (MONTHS)				
	ADMIN LEAD TIME		PROD	TOTAL AFTER 1 OCT	27
	BEFORE 1 OCT	AFTER 1 OCT			
INITIAL	6	6	21		
ORDER	6	6	4		

FACIL. NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after D day
		Minimum	Maximum	
1	UNKNOWN	3	20	52
2	KDI, OH	7	10	30

REMARKS:	LAP delivery schedule based on contractual requirements	Quantities in thousands

BUDGET ITEM JUSTIFICATION RECORD							DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: CTG, MORTAR, 120MM, ILLUM, XM930 (E25503)					
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	0	13	0	0	0	0	0	0
COST (IN MILLIONS)	\$0.0	\$26.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<p>DESCRIPTION:</p> <p>The round is used to illuminate target areas during night operations. It consists of a two-piece body filled with illuminating flare, fuze, and tail assembly. It bursts over a target, producing bright illumination which is more intense and effective than the 4.2-in illumination round it replaces. This budget line also funds the XM983 Infrared Illumination Round. The round is range matched to the 120mm high explosive (HE) and smoke cartridges. This item is code B: it has not been type classified and has not been approved for service use.</p> <p>JUSTIFICATION:</p> <p>This procurement is part of the total package fielding effort for the 120mm mortar system. The FY97 procurement provides a calibration lot and builds war reserve inventory in accordance with the Army's procurement goals.</p> <p>Type Classification Date: JUN 97 standard (STD).</p>								

AMMUNITION COST ANALYSIS																
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CTG, MORTAR, 120MM, ILLUM, XM930 (E25503)				DATE: February 1997												
ELEMENT OF COST	FY96		QTY = 0		FY97		QTY = 13,222		FY98		QTY = 0		FY99		QTY = 0	
	QTY (EA)	UNIT COST	UNIT COST	TOTAL	QTY (EA)	UNIT COST	UNIT COST	TOTAL	QTY (EA)	UNIT COST	UNIT COST	TOTAL	QTY (EA)	UNIT COST	UNIT COST	TOTAL
HARDWARE																
1. XM930/983, LAP					13,222	328.79		4,347								
2. SHELL BODY					13,751	263.40		3,622								
3. FIN ASSEMBLY M31					13,751	38.70		532								
4. CANNISTER ASSY					6,875	346.91		2,385								
5. IR CANNISTER ASSY					6,875	305.03		2,097								
6. IGN CTG M1020					13,751	25.89		356								
7. PROP CHG M234					55,004	12.98		714								
8. FUZE M776					13,751	126.77		1,743								
9. PA 153 CONTAINER					13,751	10.78		148								
10. PA 154 CONTAINER					6,875	37.77		260								
SUBTOTAL								16,204								
PROCUREMENT SUPPORT																
1. ENGINEERING SUPPORT								1,965								
2. QUALITY ASSURANCE								476								
3. PROOF & ACCEPTANCE								667								
4. INTERIM TRANSPORTATION								187								
SUBTOTAL								3,295								
NON-RECURRING COSTS																
1. CALIBRATION LOT								3,990								
2. FIRST ARTICLE /INITIAL PRODUCTION TEST								2,329								
SUBTOTAL								6,319								
TOTAL P-1 LINE ITEM							1952.65	25,818								

BUDGET PROCUREMENT HISTORY AND PLANNING						DATE: February 1997				
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION						P-1 ITEM NOMENCLATURE: CTG, MORTAR, 120MM, ILLUM, XM930 (E25503)				
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
1. <u>XM930/983, LAP</u>										
FY97	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/CR	TACOM	Jul 97	Apr 99	13,222	328.79	NO	YES	Jun 97
2. <u>SHELL BODY</u>										
FY97	CHAMBERLAIN MFG. SCRANTON, PA	OPT	TACOM	Jul 97	Oct 98	13,751	263.40	NO	YES	Jun 97
3. <u>FIN ASSEMBLY M31</u>										
FY97	VALENTEC SYSTEMS, INC MT. ARLINGTON, NJ	OPT	TACOM	Apr 97	Jan 98	13,751	38.70	YES	NO	
4. <u>CANNISTER ASSY</u>										
FY97	CRANE AAA CRANE, IN	SS/CR	N/A	Jul 97	Jun 88	6,875	346.91	NO	YES	Jun 97
5. <u>IR CANNISTER ASSY</u>										
FY97	CRANE AAA CRANE, IN	SS/CR	N/A	Jul 97	Jun 88	6,875	305.03	NO	YES	Jun 97
REMARKS: Pine Bluff Arsenal and Crane Army Ammunition Activity are government owned - government operated facilities. These activities are issued work orders, not contracts. 120mm mortar components (M31 fin, M234 prop charge, M1020 ignition cartridge, PA153 container and PA154 container) are procured on same contracts as for other 120mm mortar rounds.										

BUDGET PROCUREMENT HISTORY AND PLANNING						DATE: February 1997				
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: CTG, MORTAR, 120MM, ILLUM, XM930 (E25503)							
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPEC AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
6. IGN CTG M1020 FY97	UNKNOWN	C/FP	TACOM	Apr 97	Jan 98	13,751	25.89	YES	NO	
7. PROP CHG M234 FY97	UNKNOWN	OPT	TACOM	Apr 97	Jan 98	55,004	12.98	YES	NO	
8. FUZE M776 FY97	DIEHL GMBH SCHRAMBERG, GER	SS/FP	TACOM	Jun 97	Jan 98	13,751	126.77	YES	NO	
9. PA 153 CONTAINER FY97	OMEGA CONTAINER INC. ARCADIA, LA	OPT	TACOM	Mar 97	Sep 97	13,751	10.78	YES	NO	
10. PA 154 CONTAINER FY97	BROCKWAY STD ATLANTA, GA	OPT	TACOM	Mar 97	Sep 97	6,875	37.77	YES	NO	
REMARKS: 120mm mortar components (M31 fin, M234 prop charge, M1020 ignition cartridge, PA153 container and PA154 container) are procured on same contracts as for other 120mm mortar rounds.										

BUDGET ITEM JUSTIFICATION RECORD							DATE:	
APPROPRIATION/BUDGET ACTIVITY:		P-1 ITEM NOMENCLATURE:						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		CTG, MORTAR, 120MM, SMOKE, M929A1 (E25504)						
	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
QUANTITY (THOUSANDS)	57	27	0	0	21	21	22	19
COST (IN MILLIONS)	\$65.8	\$35.0	\$0.0	\$0.0	\$26.3	\$26.9	\$27.8	\$24.9

DESCRIPTION:

The round is used to provide smoke, with some incendiary effect, for various screening uses. It consists of a body with smoke composition filler, fuze, and tail assembly. It bursts over or on a target, producing dense smoke which is 100 percent greater than the 4.2-in smoke round it replaces. The round is range matched to the 120mm high explosive (HE) and illuminating cartridges. The M929A1 version is being procured beginning in FY96. It uses the advanced M734A1 Multi-option fuze. This item is code A; it has been type classified and approved for service use.

JUSTIFICATION:

This procurement is part of the total package fielding effort for the 120mm mortar system. FY97 procurement builds war reserve inventory and supports annual peacetime training requirements in accordance with the Army's procurement goals.

Type Classification Date: NDI - MAR 90 limited procurement - urgent(LPU);
Enhanced Ammunition - XM929, limited rate production (LRP) MAY 92; M929A1, standard (STD) JUN 96.
Acquisition Manager: PM MORTARS

AMMUNITION COST ANALYSIS										
APPROPRIATION/BUDGET ACTIVITY:										
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										
CTG, MORTAR, 120MM, SMOKE, M929A1 (E25504)										
1315-01-343-1940 (C624)										
DATE: February 1997										
ELEMENT OF COST	FY96		FY97		FY98		FY99		QTY = 0	
	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST	QTY (EA)	UNIT COST
HARDWARE										
1. LAP, M929A1	56,625	311.22	17,623	27,499	8,745	318.01				
2. SHELL BODY	58,890	172.50	10,159	28,599	5,436	190.07				
3. IGN CTG M981	58,890	25.33	1,492	28,599	740	25.89				
3a. IGN CTG M1020				28,599	1,107	38.70				
4. FIN ASSEMBLY M31	58,890	39.21	2,309	112,746						
5. PROP CHG M230	232,163	12.71	2,951	28,599						
5a. PROP CHG M234					1,463	12.98				
6. FUZE M734A1	58,890	399.80	23,544	28,599	9,761	341.32				
7. PA153 CONTAINER	58,890	10.63	626	28,599	308	10.78				
8. PA154 CONTAINER	29,445	34.59	1,018	14,299	540	37.77				
ROYALTY 3% to General Dynamics			507		262					
SUBTOTAL			60,229		28,362					
PROCUREMENT SUPPORT										
1. ENGINEERING SUPPORT			1,225		2,545					
2. QUALITY ASSURANCE			209		477					
3. PROOF & ACCEPTANCE			647		658					
4. INTERIM TRANSPORTATION			304		362					
SUBTOTAL			2,385		4,042					
NON-RECURRING COSTS										
1. M734A1 MAT'L CHANGE			2,102		2,563					
2. PVT			1,096							
SUBTOTAL			3,198		2,563					
TOTAL P-1 LINE ITEM		1162.24	65,812	1271.57	34,967					
DD FORM 2448, AUG 89										
P-1 ITEM NO 23				PAGE NO. 2 of 5 PAGES			Exhibit P-5			

BUDGET PROCUREMENT HISTORY AND PLANNING						DATE: February 1997				
APPROPRIATION/BUDGET ACTIVITY:			P-1 ITEM NOMENCLATURE:							
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			CTG, MORTAR, 120MM, SMOKE, M929A1 (E25504)							
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
1. LAP. M929A1 FY96	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/CR	TACOM	Aug 96	May 98	56,625	311.22	YES		
FY97	PINE BLUFF ARSENAL PINE BLUFF, AR	SS/FP	TACOM	Mar 97	Nov 98	27,499	318.01	YES		
2. SHELL BODY FY96	CHAMBERLAIN MFG. SCRANTON, PA	SS/FP	TACOM	Aug 96	Jun 97	58,890	172.50	YES		
FY97	CHAMBERLAIN MFG. SCRANTON, PA	OPT	TACOM	Mar 97	Jan 98	28,599	190.07			
3. IGN CTG M981 FY96	GENERAL DYNAMICS MILAN, TN	C/FP	TACOM	Sep 96	Sep 97	58,890	25.33	YES		
3a. IGN CTG M1020 FY97	UNKNOWN	C/FP	TACOM	Mar 97	Jan 98	28,599	25.89	YES		
4. FIN ASSEMBLY M31 FY96	VALENTEC SYSTEMS, INC MT. ARLINGTON, NJ	C/FP	TACOM	Sep 96	Jul 97	58,890	39.21	YES		
FY97	VALENTEC SYSTEMS, INC MT. ARLINGTON, NJ	OPT	TACOM	Apr 97	Jan 98	28,599	38.70	YES		
REMARKS: 120mm mortar components (M1020 ignition cartridge, M31 fin, M234 prop charge, PA153 container and PA154 container) are procured on same contracts as for other 120mm mortar rounds.										

BUDGET PROCUREMENT HISTORY AND PLANNING					DATE:		February 1997			
APPROPRIATION/BUDGET ACTIVITY:					P-1 ITEM NOMENCLATURE:					
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION					CTG, MORTAR, 120MM, SMOKE, M929A1 (E25504)					
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES, WHEN AVAIL
5. <u>PROP CHG M230</u> FY96	UNKNOWN	C/FP	TACOM	Apr 97	Jan 98	232,163	12.71	YES		
5a. <u>PROP CHG M234</u> FY97	UNKNOWN	OPT	TACOM	Apr 97	Jan 98	112,746	12.98	YES		
6. <u>FUZE M734A1</u> FY96	KDI CINCINNATI, OH	SS/CPIF	TACOM	Apr 96	Jun 97	9,050	446.60	YES		
FY96	KDI CINCINNATI, OH	SS/FP	TACOM	Sep 96	Oct 97	49,840	324.09	YES		
FY97	KDI CINCINNATI, OH	OPT	TACOM	Mar 97	May 98	28,599	341.32	YES		
7. <u>PA153 CONTAINER</u> FY96	OMEGA CONTAINER INC. ARCADIA, LA	C/FP	TACOM	Sep 96	May 97	58,890	10.63	YES		
FY97	OMEGA CONTAINER INC. ARCADIA, LA	OPT	TACOM	Mar 97	Sep 97	28,599	10.78	YES		
8. <u>PA154 CONTAINER</u> FY96	BROCKWAY STD ATLANTA, GA	C/FP	TACOM	Sep 96	May 97	29,445	34.59	YES		
FY97	BROCKWAY STD ATLANTA, GA	OPT	TACOM	Mar 97	Sep 97	14,299	37.77	YES		
REMARKS:										
M734A1 initial production will be procured by production option to development contractor. 120mm mortar components (M1020 ignition cartridge, M31 fin, M234 prop charge, PA153 container and PA154 container) are procured on same contracts as for other 120mm mortar rounds.										

REQUIREMENTS CONTROL SYMBOL
DD FORM 1 APR 1992

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM, SMOKE, M928A1 (E25504)

FACIL NO.	MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES		Months to reach max after 4 day
		Minimum	1.5: Maximum	
1	GENERAL DYNAMICS, TN	6	10 30	
2	PINE BLUFF ARS., AR	8.5	16 48	
3	ACCUDYNE, WI	8	15 40	
4	WOL OH	10	15 40	

*Quantities in thousands

BUDGET ITEM JUSTIFICATION RECORD

APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		DATE: February 1997						
P-1 ITEM NOMENCLATURE: CTG, TANK, 120MM, APFSDS-T, ALL TYPES (M829A2)								
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (THOUSANDS)	23	29	21	0	0	0	0	8
COST (IN MILLIONS)	79.8	103.6	72.9	0	0	0	0	73.9

DESCRIPTION:

The 120MM M829A2 Armor-Piercing, Fin-Stabilized, Discarding Sabot with Tracer (APFSDS-T), cartridge is designed specifically as an anti-armor kinetic energy round. This round is fired from the M256 120MM cannon mounted on the M1A1 Abrams tank. The propellant system consists of a combustible cartridge case mounted on a steel stub base and filled with a kerded propellant. The propellant is ignited by a M129 electric primer. The projectile incorporated a segmented graphite reinforced plastic sabot held in place by a plastic band which separates in flight to allow the discarding of the sabot from the super depleted uranium (SDU) penetrator. A synthetic rubber seal is molded to the base of the sabot assembly to prevent the forward escape of hot propellant gases. The M829A2, although using many similar components of the M829A1 APFSDS-T, has been technologically improved to provide significantly greater armor penetration capability than the older round. This item is Code A, approved for service use. This item has not transitioned to SMCA and will be procured as actual cost in FY98.

JUSTIFICATION:

FY1998 procurement builds war reserve inventory in accordance with the Army's procurement goal. The acquisition strategy for FY95-FY98 will be a sole source multi-year production contract. Production of the M829A2 will provide a "leap-ahead" in tank ammunition technology to enable the U.S. tank fleet to defeat current and postulated threat armor well into the next century. Introduction of this technological advance complies with the objective of Armament Enhancement Initiatives fielding munition deterrent prior to the introduction of a new opposing armored threat. This round encompasses evolutionary advances in technology and represents the most effective tank round in production. The round will replace the currently-fielded M829A1 APFSDS-T as production levels rise.

Acquisition Manager: Project Manager, Tank Main Armament (PM-TMAS).

WEAPON SYSTEM COST ANALYSIS									
EXHIBIT (P-5)		A. Appropriation/Budget Activity Title/No. Procurement Ammunition, Army/Activity 1.		B. WEAPON MODEL/SERIES POPULAR NAME CTG, TANK, 120MM, APFSDS-T, ALL TYPES (M829A2)		C. MANUFACTURER NAME Olin Ordnance Corp St Petersburg, FL		D. DATE February 1997	
Weapon System Cost Elements		Ident. code	FY 96 Unit Cost	22676 Total Cost	FY 97 Unit Cost	29495 Total Cost	FY 98 Unit Cost	20650 Total Cost	Unit Cost Total Cost
<u>HARDWARE</u>									
1. COMPLETE ROUND			3366.01	76328	3370.21	99404	3370.21	69595	
SUBTOTAL				76328		99404		69595	
<u>PRODUCTION SUPPORT</u>									
1. PRODUCTION ENGINEERING				1980		2150		1825	
2. QUALITY ASSURANCE				725		910		725	
3. ACCEPTANCE TESTING				775		1142		775	
SUBTOTAL				3480		4202		3325	
TOTAL			3519.48	79808	3512.67	103606	3531.23	72920	

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

A. DATE
February 1997

B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION						CTG, TANK, 120MM, APFSDS-T, ALL TYPES (M829A2)				
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
1. COMPLETE ROUND										
FY 96	Olin Ordnance Corp St Petersburg, FL	SSM-4/FP	ARDEC	Mar 96	Jan 97	22676	3366.01	YES	NO	
FY97	Olin Ordnance Corp St Petersburg, FL	SSM-4/FP	ARDEC	Feb 97	Dec 97	23664	3370.21	YES	NO	
FY 97	Olin Ordnance Corp St Petersburg, FL	SS-OPTION	ARDEC	Sep 97	Dec 98	5831	3370.21	YES	NO	
FY98	Olin Ordnance Corp St Petersburg, FL	SSM-4/FP	ARDEC	Feb 98	Mar 99	20650	3370.21	YES	NO	

D. REMARKS

FY95 IS THE FIRST YEAR OF A 4 YEAR MULTI-YEAR CONTRACT WITH AN ANNUAL OPTION CLAUSE TO INCREASE QUANTITIES.

BUDGET ITEM JUSTIFICATION RECORD

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:

CTG, TANK, 120MM, HEAT/MP, ALL TYPES (M830A1)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (THOUSANDS)	0	31	0	0	0	0	0	0
COST (IN MILLIONS)	0	9	0	0	0	0	0	0

DESCRIPTION:

The 120MM M830A1 Multi-Purpose (MP) cartridge is effective against light armor, air defense and materiel. This round is fired from the M256 120MM cannon mounted on the M1A1 Abrams tank. Appropriate targets include lightly armored vehicles with reactive armor, helicopters, buildings and bunkers, the side and rear aspects of tanks, and dismounted anti-tank and automatic weapons teams. The fixed round utilizes a combustible cartridge case affixed to a steel stub and loaded with granular propellant. The fin-stabilized, high chrome alloy projectile body is press-loaded with explosive, a precision copper liner and booster. The base element is armed during launch and initiated by an impact switch or proximity sensor, depending upon the operational mode selected by the tank crew. Arming is accomplished through the ballistic environment of firing, set back and deceleration. This item is code A, approved for service use. This item has not transitioned to SMCA and will be procured as actual cost in FY97

JUSTIFICATION:

FY1997 procurement builds war reserve inventory in accordance with the Army's procurement goal. The production and fielding of the M830A1 provides increased accuracy when compared to the currently fielded M830 High Explosive Anti-Tank Multi-Purpose with Tracer (HEAT-MP-T) cartridge, due to reduced time of flight. For the first time ever, the M830A1 provides the individual tank crew with the self-defense capability to engage and defeat attacking helicopter platforms. In light of the proliferation and increasing lethality of helicopters on the modern battlefield, the M830A1 is a round which our soldiers need now. The M830A1 replaces the currently fielded M830 round to provide significantly enhanced capability to the 120mm gun tank fleet.

Acquisition Manager: Project Manager, Tank Main Armament (PM-TMAS).

WEAPON SYSTEM COST ANALYSIS						
EXHIBIT (P-5)						
A. Appropriation/Budget Activity Title/No. Procurement Ammunition, Army/Activity 1.		B. WEAPON MODEL/SERIES POPULAR NAME CTG, TANK, 120MM, HEAT/MP, ALL TYPES (M830A1)		C. MANUFACTURER NAME Alliant Techsystems Minneapolis, MM		D. DATE February 1997
Weapon System Cost Elements	Ident. code	FY96 Unit Cost	FY97 Unit Cost	FY97 Total Cost	FY98 Unit Cost	FY98 Total Cost
<u>HARDWARE</u>						
1. COMPLETE ROUND			3150.00	27405		
SUBTOTAL				27405		
<u>PRODUCTION SUPPORT</u>						
1. PRODUCTION ENGINEERING				2216		
2. QUALITY ASSURANCE				700		
3. ACCEPTANCE TESTING				650		
SUBTOTAL				3566		
TOTAL			3559.89	30971		

Exhibit P-5 Weapon System Cost Analysis

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A. DATE February 1997
B. APPROPRIATION/BUDGET ACTIVITY		C. P-1 ITEM NOMENCLATURE				CTG, TANK, 120MM, HEAT/MP, ALL TYPES (M830A1)				
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
1. COMPLETE ROUND										
FY97	Alliant Techsystems Minneapolis, M	SS/FP	AMCCOM	May 97	Feb 98	8700	3150.00	YES	NO	
D. REMARKS										

FY 96/97 BUDGET PRODUCTION SCHEDULE										P-1 ITEM NOMENCLATURE										Date									
										CTG, TANK, 120MM, HEAT/MP, ALL TYPES (M830A1)										February 1997									
										FISCAL YEAR 97										FISCAL YEAR 98									
										CALENDAR YEAR 97										CALENDAR YEAR 98									
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BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG TANK 120MM TP-T M831/M831A1

(E73300)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	40	93	80	68	68	69	69	68
COST (In Millions)	\$ 29.1	\$ 54.6	\$ 52.2	\$ 46.5	\$ 47.5	\$ 49.5	\$ 50.4	\$ 50.9

DESCRIPTION:

The 120mm M831A1 Target Practice-Tracer (TP-T) is a target practice round that simulates the ballistics of the chemical energy service round (M830). This round is fired from the M256 120mm smooth bore cannon on the M1A1/M1A2 Abrams tank. The projectile is inert and is composed of a steel spike aluminum body, ring, stabilizer, nylon obturator, and tracer. The stabilizer spins the round in flight. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. Tank crews conduct live fire training with this round to meet and maintain gunnery proficiency. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals. The acquisition strategy for FY 95 - FY 98 is a multi-year production contract.

TYPE CLASSIFICATION DATE:

1993

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QM1DOC4Z

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
P-1 ITEM NOMENCLATURE:
CTG TANK 120MM TP-T M831A1
DATE: FEBRUARY 1997
NSN = 1315-01-369-6612
(E73300)

		FY 96	(QTY	40396)	FY 97	(QTY	92817)	FY 98	(QTY	79772)	FY 99	(QTY	68125)
ELEMENT OF COST		QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
HARDWARE													
1.COMPLETE ROUND		40396	564.97	22823	92817	529.30	49128	79772	564.97	45069	68125	589.34	40149
SUBTOTAL				22823			49128			45069			40149
PRODUCTION SUPPORT													
1.PRODUCTION ENGINEERING				707						4606			4103
2.QUALITY ASSURANCE				32			40			113			100
3.ACCEPTANCE TESTING				262						518			462
4.INTERIM TRANSPORTATION				87						324			289
5.INDUSTRIAL STOCK SUPPORT				970						1596			1422
6.CAWCF GAIN/LOSS SURCHARGE				4172			5408						
SUBTOTAL				6230			5448			7157			6376

TOTAL P-1 LINE ITEM			719.21	29053		587.99	54576		654.69	52226		682.93	46525

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1315-01-369-6612

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG TANK 120MM TP-T M831A1

(E73300)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL: NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. COMPLETE ROUND										
FY 1996	ALLIANT TECH SYS, INC NEW BRIGHTON, MN	CM-2/FP	IOC	JAN 96	OCT 96	24696	# 494.85			
FY 1996	OLIN CORP	CM-2/FP	IOC	JAN 96	NOV 96	15700	# 603.16			
FY 1997	ST. PETERSBURG, FL ALLIANT TECH SYS, INC	CM-3/FP	IOC	NOV 96	OCT 97	64637	# 509.40	YES	NO	
FY 1997	NEW BRIGHTON, MN OLIN CORP	CM-3/FP	IOC	NOV 96	NOV 97	28180	# 601.17	YES	NO	
FY 1998	ST. PETERSBURG, FL TBS	CM-4/FP	IOC	JAN 98	OCT 98	79772	564.97	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	OCT 99	68125	589.34			

REMARKS:

FY 96 AND FY 97, ACTUAL CONTRACT PRICE (AVERAGE OF BASIC AND OPTIONS)
 MULTI YEAR PROCUREMENT FY 95 - FY 98
 FY 98, TBS - TO BE SELECTED, ALLIANT/OLIN 60/40 SPLIT
 FY 99, TBS - TO BE SELECTED

PRODUCTION SCHEDULE (EXHIBIT P-21)

APPROPRIATION/BUDGET ACTIVITY: P-1 ITEM NOMENCLATURE: CTG TANK 120MM TP-T M831A1

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

DATE: FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL: DD COMP (AR) 1092

FISCAL YEAR: 97

FISCAL YEAR: 98

FISCAL YEAR: 99

CALENDAR YEAR: 96

CALENDAR YEAR: 97

CALENDAR YEAR: 98

CALENDAR YEAR: 99

MONTH: OCT

MONTH: NOV

MONTH: DEC

MONTH: JAN

MONTH: FEB

MONTH: MAR

MONTH: APR

MONTH: MAY

MONTH: JUN

MONTH: JUL

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MONTH: FEB

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MONTH: APR

MONTH: MAY

MONTH: JUN

MONTH: JUL

MONTH: AUG

MONTH: SEP

MONTH: OCT

MONTH: NOV

MONTH: DEC

MONTH: JAN

MONTH: FEB

MONTH: MAR

MONTH: APR

MONTH: MAY

MONTH: JUN

MONTH: JUL

MONTH: AUG

MONTH: SEP

MONTH: OCT

MONTH: NOV

MONTH: DEC

MONTH: JAN

MONTH: FEB

MONTH: MAR

MONTH: OCT

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MONTH: DEC

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MONTH: FEB

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MONTH: APR

MONTH: MAY

MONTH: JUN

MONTH: JUL

MONTH: AUG

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MONTH: OCT

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MONTH: AUG

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MONTH: NOV

MONTH: DEC

MONTH: JAN

MONTH: FEB

MONTH: MAR

FAC NO.	MANUFACTURER NAME & LOCATION	MINIMUM SUST.	1-8-5	MAXIMUM	MONTHS TO REACH MAX AFTER 8-DAY
1	ALLIANT TECH, MN	7.20	9.00	24.00	5
2	OLIN ORDNANCE, FL	4.80	6.00	16.00	5
3	TBS-ALLIANT/OLIN SPLIT	12.00	15.00	40.00	5
4	TBS	12.00	15.00	40.00	5

PROCUREMENT LEAD TIME			TOTAL	
PRIOR 1 OCT	AFTER 1 OCT	PROD.	INITIAL REORDER	AFTER 1 OCT
6	4	9	13	13

REMARKS:
 PRODUCED BY SYSTEMS CONTRACTORS.
 M865/M831 LINE SHARE
 PRODUCTION RATES ARE STAND ALONE
 BOTH CONTRACTORS LAP AT IOWA AAP FOR FY94-96
 FY95-98 MULTI YEAR PROCUREMENT 60/40 SPLIT
 QUANTITY IN THOUSANDS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG TANK 120MM TPCSDS-T M865

(E73400)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	132	211	184	160	172	173	174	174
COST (In Millions)	\$ 90.0	\$ 115.5	\$ 111.7	\$ 103.5	\$ 113.7	\$ 116.9	\$ 120.8	\$ 123.7

DESCRIPTION:

The 120mm M865 Target Practice Cone-Stabilized Discarding Sabot with Tracer (TPCSDS-T) is a target practice round that simulates the ballistics of the 120mm M829A2 Armor Piercing Fin-Stabilized Discarding Sabot with Tracer round. This round is fired from the M256 120mm cannon on the M1A1/M1A2 Abrams tank. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals. The requested ammunition is required to support annual tank proficiency training for 120mm-gunned tanks. Training with this round simulates the firing of the Army's most lethal armor-defeating kinetic energy round in support of Army readiness objectives. The acquisition strategy for FY 95 - FY 98 is a multi-year production contract.

TYPE CLASSIFICATION DATE:

1984

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

PCN:P02QM1DOC45

DATE: FEBRUARY 1997
NSN = 1315-01-288-5545
(E73400)

P-1 ITEM NOMENCLATURE:
CTG TANK 120MM TPCSDS-T M865

FY 96		(QTY	131884)	FY 97	(QTY	210914)	FY 98	(QTY	183875)	FY 99	(QTY	159547)	
ELEMENT OF COST		UNIT		UNIT		UNIT		UNIT		UNIT		UNIT	
QM: EACH		QTY		COST		COST		COST		COST		COST	
TOTAL		QTY		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
HARDWARE													
1.COMPLETE ROUND		131884	524.01	69109	210914	490.92	103542	183875	524.01	96352	159547	559.89	89329
SUBTOTAL				69109			103542			96352			89329
PRODUCTION SUPPORT													
1.PRODUCTION ENGINEERING				2142						9847			9129
2.QUALITY ASSURANCE				97			145			241			233
3.ACCEPTANCE TESTING				795						1108			1027
4.INTERIM TRANSPORTATION				263			155			694			643
5.INDUSTRIAL STOCK SUPPORT				2936						3411			3164
6.CAWCF GAIN/LOSS SURCHARGE				12633			11450						
SUBTOTAL				18866			11750			15301			14186
NONRECURRING													
1.HATR SAFETY MODIFICATION				2000			250						
SUBTOTAL				2000			250						

TOTAL P-1 LINE ITEM			682.23	89975		547.82	115542		607.22	111653		648.81	103515

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1315-01-288-5545

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG TANK 120MM TPCSDS-T M865

(E73400)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. COMPLETE ROUND										
FY 1996	ALLIANT TECH SYS, INC NEW BRIGHTON, MN	CM-2/FP	IOC	JAN 96	OCT 96	81839	# 483.54			
FY 1996	OLIN CORP ST. PETERSBURG, FL	CM-2/FP	IOC	JAN 96	NOV 96	50045	# 560.08			
FY 1997	ALLIANT TECH SYS, INC NEW BRIGHTON, MN	CM-3/FP	IOC	NOV 96	OCT 97	144057	# 491.91	YES	NO	
FY 1997	OLIN CORP ST. PETERSBURG, FL	CM-3/FP	IOC	NOV 96	NOV 97	66857	# 559.62	YES	NO	
FY 1998	TBS	CM-4/FP	IOC	JAN 98	OCT 98	183875	524.01	YES	NO	
FY 1999	TBS	C/FP	IOC	JAN 99	OCT 99	159547	559.89			

REMARKS:

#FY 96 AND FY 97, ACTUAL CONTRACT PRICE (AVERAGE OF BASIC AND OPTIONS)
MULTI YEAR PROCUREMENT FY 95 - FY 98
FY 98, TBS - TO BE SELECTED, ALLIANT/OLIN 60/40 SPLIT
FY 99, TBS - TO BE SELECTED

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE												
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION				CTG ARTY 75MM BLANK M337A1 (EPL000)												
	FY	96	FY	97	FY	98	FY	99	FY	00	FY	01	FY	02	FY	03
QUANTITY (Thousands)		39	-0-		70		34		34			32		32		32
COST (In Millions)	\$	1.5	\$ -0-		\$ 3.0		\$ 1.5		\$ 1.5		\$ 1.5		\$ 1.4		\$ 1.5	

DESCRIPTION:

The 75mm blank cartridge is used on the Pack 75 howitzer for ceremony, parade, and training purposes. The cartridge consists of a brass aluminum cartridge case containing loosely packed black powder and a press-fitted percussion primer. A fiber wad is inserted over the black powder and a polystyrene closing cap is cemented in place with a polyester resin adhesive. This item is Code A, approved for service use, and will be procured through the OAMP at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports Presidential and VIP salutation, simulated firing, and annual peacetime training.

TYPE CLASSIFICATION DATE:

1975

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1D0043

DATE: FEBRUARY 1997
NSN = 1315 01 30/ 3944
(E15200)APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITIONP-1 ITEM NOMENCLATURE:
CTG ARTY 75MM BLANK M337A1

ELEMENT OF COST QM: EACH	FY 96		FY 97		FY 98		FY 99		FY 10	
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY
HARDWARE										
1. LOAD, ASSEMBLE, AND PACK (LAP)	39487	22.45	886				70088	30.49	2137	33710
2. *BLACK POWDER, CLASS 1 (LB)	55282	2.70	149				98124	2.70	265	47194
3. PRIMER PERC M181A2	40277	5.07	204				71490	5.33	381	34385
4. *PRIMER PERC M61	40672	0.58	23				72191	0.31	22	34722
SUBTOTAL			1262						2805	
PRODUCTION SUPPORT										
1. PRODUCTION ENGINEERING			39						287	
2. QUALITY ASSURANCE			15						7	
3. ACCEPTANCE TESTING			5						32	
4. INTERIM TRANSPORTATION			54						20	
5. INDUSTRIAL STOCK SUPPORT			231						100	
6. CACCF GAIN/LOSS SURCHARGE										
SUBTOTAL			346						446	
NONRECURRING										
1. *GOVERNMENT FURNISHED MATERIAL			-149						-287	
SUBTOTAL			-149						-287	
TOTAL P-1 LINE ITEM			1459						2964	
			36.95						42.29	
									43.16	

PCN PO2QM1DOD42

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1315 01 307 3944

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CTG ARTY 75MM BLANK M337A1

(E15,200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	MASON-HANGER SILAS MIDDLETON, IA	SS/CPFF	IOC	MAR 97	JUN 97	39487	22.45			
FY 1998	MASON-HANGER SILAS MIDDLETON, IA	SS/CPFF	IOC	MAR 98	JUN 99	70088	30.49	YES	NO	
FY 1999	MASON-HANGER SILAS MIDDLETON, IA	SS/CPFF	IOC	MAR 99	JUN 00	33710	31.13			
2. *BLACK POWDER, CLASS 1 (LB)										
FY 1996	STOCK ISSUE	N/A	N/A	N/A	N/A	55282	N/A	N/A	N/A	
FY 1998	STOCK ISSUE	N/A	N/A	N/A	N/A	98124	N/A	N/A	N/A	
FY 1999	STOCK ISSUE	N/A	N/A	N/A	N/A	47194	N/A	N/A	N/A	

REMARKS:

PCN PO2QMIDOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1315-01 307 3944

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CTG ARTY 75MM BLANK M337A1

(E15,200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES: WHEN AVAIL
3. PRIMER PERC M1B1A2										
FY 1996	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	NOV 96	MAR 97	40277	5.07			
FY 1998	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	MAR 98	MAR 99	71490	5.33	YES	110	
FY 1999	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	MAR 99	MAR 00	34385	5.44			
4. *PRIMER PERC M61										
FY 1996	DAY & ZIMMERMAN TEXARKANA, TX	SS/CPFF	IOC	NOV 96	MAR 97	40672	N/A			
FY 1998	STOCK ISSUE	N/A	N/A	N/A	N/A	72191	N/A	N/A	N/A	N/A
FY 1999	STOCK ISSUE	N/A	N/A	N/A	N/A	34722	N/A	N/A	N/A	N/A

REMARKS:

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE								
PROCUREMENT OF AMMUNITION / Ammunition		CTG ARTY 105MM DPICM XM915 (E53500)								
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
QUANTITY	0	6	0	0	0	0	0	0		
COST (in millions)	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0		
<p>The 105MM Dual Purpose Improved Conventional Munition (DPICM) XM915 is the extended range round for the M1 19A1 howitzer. This cartridge incorporates the M200 propelling charge whose projectiles contain a sub-munition payload of 42 dual purpose XM80 grenades. The projectiles utilize a one piece all steel body/ogive assembly which is scalloped to contain the cargo without additional ancillary hardware (keys, splines, spacers, etc.). Projectile functioning is the same as the 155mm ICM round, the M483A1. The XM80 is a 1.22 inch diameter fragmentation/shaped charge grenade optimized for the 105mm system. It uses a post embossed Rhombus fragmentation pattern for superior anti-personnel performance. In response to the problem of hazardous battlefield duds, the XM80 grenade will be the first ICM bomblet to utilize self destruct fuzing. This item is code B, not approved for service use. RDT&E funding for this program is in PE 64802. This item has not transitioned to the SMCA and will be produced as actual cost.</p> <p>JUSTIFICATION:</p> <p>The FY 1997 procurement supports the acquisition of a more lethal artillery round and provides "deep strike" round capability for the Light Infantry Division (LID). It increases sustainability of the LID on the battlefield. It replaces the Cartridge, 105mm and Anti-Personnel (APICM), M444. By utilizing a self-destruct fuze with sub-munition, the dud rate problem of any unexploded sub-munitions should be greatly reduced. Procurement builds war reserve stockpiles in support of the Army's procurement goal.</p> <p>Type Classification Date: TC LRP June 1997 TC STD June 1998</p>										

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)		A. Appropriation Budget Activity Title/No. Procurement Ammunition, ARMY/Activity 1. Ammunition				B. WEAPON CTG ARTY 105MM DPICM XM915 (E53500)		C. MANUFACTURER NAME PLANT CITY/STATE LOCATION Ray & Zimmerman Inc Lone Star AAP		D. DATE February 1997			
Weapon System Cost Elements	Ident. Code	FY96			FY97			FY98			FY99		
		Unit Cost	Qty	Total Cost	Unit Cost	Qty x1000	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost
HARDWARE	B				256.92	6	1503						
1. LOAD, ASSEMBLE, & PACK					251.95	6	1582						
2. PROJ MTL PARTS					2.37	264	625						
3. GREN BODY ASSY					4.50	264	1187						
4. FUZES, XM234 GREN SD					116.10	6	729						
5. CARTRIDGE CASE XM217					70.87	6	445						
6. CONTAINER PA 117							772						
7. OTHER HARDWARE													
SUBTOTAL HARDWARE COST							6,843						
PRODUCTION SUPPORT													
1. ENGINEERING SUPPORT							1237						
2. QUALITY ASSURANCE							55						
3. PROOF & ACCEPTANCE							197						
4. INTERIM TRANSPORTATION							65						
SUBTOTAL SUPPORT COST							1,554						
NON-RECURRING COST													
1. First Article Testing							200						
2. Firing Tables/Software Update							55						
3. SD Fuze Facility							5420						
4. M80 KNURLING PROCESS							100						
SUBTOTAL NON-RECURRING COST							5,775						
TOTAL P-1 LINE ITEM							14172						
PROGRAM UNIT COST							2422.56						
P-1 SHOPPING LIST Item No. 29 Page 2 of 4				UNCLASSIFIED				Exhibit P-5 Weapon System Cost Analysis					

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										
B. APPROPRIATION / BUDGET ACTIVITY					DATE		February 1997			
C. P-1 ITEM NOMENCLATURE										
CTG ARTY 105MM DPICM XM915 (E53500)										
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST \$	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES W/A
1. Load, Assemble, and Pack FY 97	Day & Zimmerman Inc (Lone Star AAP)	SS/CPFF	ARDEC	Jul-97	Dec-97	5850	256.92	YES	NO	
2. Proj Mtl Parts FY 97	Chamberlain Mfg. (Scranton, PA)	SS/FP	ARDEC	Jul-97	Oct-97	6279	251.95	YES	NO	
3. Gren Body Assy FY 97	Amron Corporation Waukesha, Wis.	SS/FP	ARDEC	Jul-97	Oct-97	263704	2.37	YES	NO	
4. Fuzes, XM234 Gren SD FY 97	KDI Precision Products Cincinnati, OH	SS/FP	ARDEC	Jul-97	Oct-97	263704	4.50	YES	NO	
5. Cartridge Case XM217 FY 97	UNKNOWN	C/FP	ARDEC	Jul-97	Oct-97	6279	116.10	YES	NO	
6. Container PA 117 FY 97	UNKNOWN	C/FP	ARDEC	Jul-97	Oct-97	6279	70.87	YES	NO	
REMARKS:										

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		PROJ ARTY 155MM SMOKE WP M825 (E67800)									
		FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03		
QUANTITY (Thousands)		-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$	5.0	\$ 15.0	\$ 12.6	\$ 12.1	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION

The M825 series 155mm white phosphorous (WP) smoke projectile is designed to be ballistically similar to the M483A1 family of projectiles and is compatible with all current and developmental U.S. 155mm artillery weapon systems. The M825 series projectile is required to provide fire support to forward area troops and equipment. Artillery delivered smoke screens are required in combat situations to support maneuver forces by reducing the effectiveness of enemy visual observation. The M825 series projectile consists of a modified M483A1 carrier, a felt wedge payload, a base, and a separately issued fuze. The modified carrier uses steel instead of the standard M483A1 fiber glass wrap about the circumference of the projectile carrier in a hermetically sealed canister positioned in the projectile body between the ogive and the base. The canister is a cylinder of thin rolled steel to which flat steel ends are welded. Either a mechanical or electronic time fuze is used to detonate the expulsion charge setting off a chain reaction resulting in the expulsion, ignition, and dissemination of the felt wedges thus creating the desired smoke screen. This item is Code A, approved for service use.

JUSTIFICATION:

This is a training standard item used in both training and combat. FY 98/99 procurement supports an urgently needed materiel change to correct current design defects that result in a high malfunction rate which threatens the safety of the using unit. The purpose of the materiel change is to test an improved design to allow resumption of prior year production and subsequent renovation of existing stocks. Renovation of these stocks is required to support annual peacetime training requirements and build a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1982

BUDGET ITEM JUSTIFICATION SHEET							DATE
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE					February 1997
PROCUREMENT OF AMMUNITION / Ammunition		PROJ ARTY 155MM HE M795 (E66800)					
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
QUANTITY	130	84	0	0	0	0	0
COST (in millions)	55.4	40.0	0.0	0.0	0.0	0.0	0.0
<p>DESCRIPTION: The M795 projectile consists of 23.8 pounds of TNT explosive loaded into a 78.1 pound high fragmentation steel body assembly. The base is protected by a carbon steel base plate. The projectile is fitted with a protective lifting plug at the nose and a grommet which protects the rotating band during shipping and handling. The projectile can use several different fuzes (impact, mechanical time and short intrusion proximity). The M795 will supplement the currently stockpiled M107. It will be used for conventional fire support for Harassment and Interdiction, fragmentation, mining and blast effect. It is also used as a registration round for the M483A1 family of cargo munitions and can be used as a registration round for the 155mm Sense and Destroy Armor (SADARM) M898. It provides greater range and effectiveness than the M107, which cannot be fired at top zone with the M203A1 (Zone 8) charge. This item is Code A, approved for service use.</p> <p>This item is not being procured by the CAWCF.</p> <p>JUSTIFICATION: The M795 will support the following howitzers: M198, M109 Series, including Paladin, and the Trilateral FH70.</p> <p>TYPE CLASSIFICATION DATE: February 1982</p>							

WEAPON SYSTEM COST ANALYSIS						
EXHIBIT (P-5)		A. Appropriation/Budget Activity Title/No.	B. WEAPON MODEL/SERIES POPULAR NAME PROJ ARTY 155MM HE M795 (E66800)	C. MANUFACTURER NAME PLANT CITY/STATE/LOCATION Mason & Hanger, Iowa AAP, IA	D. DATE February 1997	
Ammunition Cost Elements	Ident. code	FY 96 Unit Cost	(QTY: 130) Total Cost	FY 97 Unit Cost	(QTY: 84) Total Cost	FY 98 Unit Cost
<u>HARDWARE</u>	A					
Load, Assemble, and Pack		155	20118	84	14316	
Metal Parts		232	30528	85	17872	
SUBTOTAL			50646		32187	
<u>PRODUCTION SUPPORT</u>						
Production Engineering			1738		5131	
Quality Assurance			911		1074	
Acceptance Testing			1489		1570	
SUBTOTAL			4138		7775	
<u>NONRECURRING COST</u>						
Metal Pallet ECP			662			
SUBTOTAL			662			
TOTAL		427	55446	475738	39962	

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A DATE February 1997	
B. APPROPRIATION / BUDGET ACTIVITY										C. P-1 ITEM NOMENCLATURE	
PROCUREMENT OF AMMUNITION / 1 / Ammunition										PROJ ARTY 155MM HE M795 (E66800)	
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY x1000	UNIT COST \$	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES W/A	
Load, Assemble, and Pack											
FY 96	Mason & Hanger, Iowa AAP, IA	Option	ARDEC	Mar-97	Oct-98	130	155	Yes	No		
FY 97	Unknown	C/FFP	ARDEC	Nov-97	Oct-99	84	170	Yes	No		
Metal Parts											
FY 96	Chamberlain, Scranton AAP, PA	Option	ARDEC	Aug-96	Jul-98	131	232	Yes	No		
FY 97	Unknown	C/FFP	ARDEC	Nov-97	Jul-99	85	210	Yes	No		
REMARKS:											

BUDGET ITEM JUSTIFICATION SHEET									
APPROPRIATION / BUDGET ACTIVITY		DATE February 1997							
PROCUREMENT OF AMMUNITION, ARMY /1/Ammunition		P-1 ITEM NOMENCLATURE PROJ ARTY 155MM SADARM M898 (E66300)							
FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
150	600	507	1085	1307	1977	2292	2737		
41.1	93.7	67.9	77.6	84.3	83.7	89.6	99.7		
<p>QUANTITY</p> <p>COST (in millions)</p> <p>DESCRIPTION: The 155mm Sense and Destroy Armor (SADARM) projectile will provide an enhanced counterbattery and anti-armored vehicle capability to attack targets well beyond the Forward Line of Troops (FLOT). The SADARM projectile will function in a fire and forget mode. This indirect fire mission can be accomplished under inclement weather, degraded battlefield conditions and Nuclear, Biological, Chemical (NBC) environments, both day and night. The SADARM munitions are designed for use against self-propelled howitzers, lightly armored personnel carriers and other stationary lightly armored threat vehicles encountered in counterfire, close support, Suppression of Enemy Air Defense (SEAD) and interdiction. The 155mm SADARM is delivered in the same manner as other 155mm munitions. Once dispensed from its carrier, the submunition detects targets using dual-mode millimeter wave and infrared sensors, and fires an explosively formed penetrator through the top of the target. The projectile is compatible with the momentum limits of standard and developmental 155mm Howitzers. It is ballistically similar to the cargo family of 155mm ammunition. Operational interface with other systems will be accomplished through Tactical Fire Control System (TACFIRE), Advanced Field Artillery Tactical Data System (AFATDS), and appropriate target acquisition sources. The item is Code A, approved for limited service use.</p> <p>This item is not being procured by the CAWCF.</p> <p>JUSTIFICATION: The FY 1998 and FY1999 budget provides for production of war reserve requirements. The SADARM procurement will provide pinpoint accuracy to destroy hardened targets and will reduce consumption of artillery ammunition. SADARM will support the Howitzer M109 series, including Paladin and M198 Howitzer systems</p> <p>Type Classification Dates: Low Rate Production: January 1995 Standard: September 1998</p> <p>Milestone Approval: Milestone IIIA (DAB): March 1995 Milestone III (ASARC): September 1998</p>									

WEAPON SYSTEM COST ANALYSIS									
EXHIBIT (P-5)									
Weapon System Cost Elements	Ident. code	A. Appropriation/Budget Activity Title/No.		B. WEAPON MODEL/SERIES POPULAR NAME PROJ ARTY 155MM SADARM M898		C. MANUFACTURER NAME PLANT CITY/STATE/LOCATION Aerojet, Azusa, Ca		D. DATE February 1997	
		FY 96 Unit Cost	(QTY: 150) Total Cost	FY 97 Unit Cost	(QTY: 600) Total Cost	FY 98 Unit Cost	(QTY: 507) Total Cost	FY 99 Unit Cost	(QTY: 1085) Total Cost
<u>HARDWARE</u>	A								
COMPLETE ROUND METAL PALLETS		226260	33939	133653	80192	103596 212	52523 18	62792 216	68129 16
SUBTOTAL			33939		80192		52541		68145
<u>PRODUCTION SUPPORT</u>									
PRODUCTION ENGINEERING			4279		5360		5197		5334
QUALITY ASSURANCE			166		261		266		271
ACCEPTANCE TESTING					1050		1785		1822
SUBTOTAL			4445		6671		7248		7427
<u>NONRECURRING COST</u>									
FIRST ARTICLE TESTING			909		453				
INITIAL PRODUCTION TESTING			10		2972		2053		
LIVE FIRE TESTING			65		75		1040		
COST REDUCTION/RELIABILITY GROWTH			1735		1000		5027		
VALUE ENGINEERING					2308				2000
SUBTOTAL			2719		6808		8120		2000
TOTAL		274020	41103	156118	93671	133943	67909	71495	77572

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A. DATE February 1997									
B. APPROPRIATION / BUDGET ACTIVITY		C. P-1 ITEM NOMENCLATURE PROJ ARTY 155MM SADARM M898																	
PROCUREMENT OF AMMUNITION, ARMY / 1 / Ammunition		CONTRACT METHOD AND TYPE		CONTRACTED BY		AWARD DATE		DATE OF FIRST DELIVERY		QTY Each		UNIT COST \$		SPECS AVAIL NOW		SPEC REV REQ'D		IF YES W/A	
LINE ITEM / FISCAL YEAR		CONTRACTOR AND LOCATION																	
Complete Round		Aerojet, Azusa CA		OPTION ARDEC		May-96		Jun-97		150		226257		Yes		No			
FY 96		Aerojet, Azusa CA		SS/FFP ARDEC		Jan-97		Dec-97		600		133653		Yes		No			
FY 97		Aerojet, Azusa CA		OPTION ARDEC		Dec-97		Dec-98		507		103595		Yes		No			
FY 98		Aerojet, Azusa CA		SS/FFP ARDEC		Dec-98		Dec-99		1085		62791		Yes		No			
FY 99																			
Metal Pallets																			
FY 96		Nomura, Rock Island IL		SS/FFP ACALA		Jan-98		Jun-98		84		212		Yes		No			
FY 97		Nomura, Rock Island IL		OPTION ACALA		Jan-99		Jun-99		72		216		Yes		No			
FY 98																			
FY 99																			
REMARKS:																			

BUDGET ITEM JUSTIFICATION SHEET

DATE

February 1997

APPROPRIATION / BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT OF AMMUNITION /Ammunition

MULTI OPTION FUZE, ARTILLERY (MOFA) (ER8017)

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY (000)	0	0	0	5	100	200	310	400
COST (in millions)	0.0	0.0	0.0	6.1	30.9	59.0	60.0	61.2

DESCRIPTION: This budget line item supports procurement of the Multi-Option Fuze, Artillery (MOFA). MOFA will provide the Army with a fuze that will perform all functions needed for bulk filled bursting type artillery projectiles in a standard artillery fuze contour. MOFA provides proximity, precision time, impact and delay after impact functions. MOFA is inductively settable allowing projectiles to be pre-fuzed and handled by automated ammunition handling systems.

MOFA will significantly enhance the capability of current and future 105mm and 155mm weapon systems enabling automatic as well as hand setting modes. Currently fielded proximity and point detonating fuzes lack the autoseat feature. MOFA can be set for precision time from 0.5 to 199.9 seconds in 0.1 second increments. MOFA can be set to turn-on its proximity sensor from 2 to 199 seconds in 1 second increments. The proximity sensor incorporates a Monolithic Millimeter/Microwave Integrated Circuit to provide a precise height of burst. MOFA contains a fixed delay after impact function. It has an impact function and a point-detonating backup for time and proximity functions. MOFA is absolutely essential for future weapon systems such as Crusader which will pre-fuze ammunition for automated handling. This item will be procured at actual cost.

JUSTIFICATION: The Multi-Option Fuze, Artillery (MOFA) supports all current bursting Artillery ammunition for 105mm and 155mm cannon. The fuze will be used on Artillery Ammunition supporting existing cannon systems such as M198 and M109 series, including Paladin. The MOFA fuze is critical for support of future Artillery units such as Crusader which rely on MOFA's inductive set capability for automated ammunition handling and rate of fire. Procurement will support testing, training and war reserve requirements.

TYPE CLASSIFICATION DATE: June 1997

Ammo Cost Analysis	A. APPN / BUDGET ACTIVITY TITLE/NO PROCUREMENT OF AMMUNITION / 1 / Ammunition				B. WEAPON MULTI OPTION FUZE, ARTILLERY (MOFA) (ER8017)				C. MANUFACTURER NAME ATK		D. DATE February 1997	
	FY 96				FY 97				FY 98		FY 99	
	ID	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	UnitCost	TotalCost	Qty	UnitCost
Cost Elements	cd	\$000	Each	\$	\$000	Each	\$	\$000	\$	\$000	Each	\$
AMMUNITION HARDWARE												
Complete Fuze, XM773										5401	5000	1080
M2A1 Ammo Cans (Packing)										5	625	8
SubTotal AMMO Hardware								5406				
Production Support Costs												
Production Engineering								500				
Quality Assurance								150				
SubTotal Prod. Support								650				
COST - Nonrecurring												
SubTotal COST-Nonrecurring												
TOTAL								6056			5000	1211

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										DATE
B. APPROPRIATION / BUDGET ACTIVITY										February 1997
C. P-1 ITEM NOMENCLATURE										
MULTI OPTION FUZE, ARTILLERY (MOFA) (ER8017)										
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST \$	SPEC AVAIL NOW	SPEC REV REQ'D	IF YES W/A
AMMUNITION HARDWARE										
Complete Fuze, XM773 FY 99	Alliant Techsystems/Hopkins, MN	SS/FFP	ARDEC	Mar-99	Jan-00	5000	1080	N	Y	Jun-97
M2A1 Ammo Cans (Packing) FY 99	TBD	C/FFP	IOC	Dec-98	Apr-99	625	8	Y	N	
REMARKS: First buy will be a FFP sole source contract with Alliant Techsystems, Hopkins, MN.										

BUDGET ITEM JUSTIFICATION SHEET

DATE
FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY										P-1 ITEM NOMENCLATURE		FEBRUARY 1997			
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										MINE TRAINING ALL TYPES (EA0800)					
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03							
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-							
COST (In Millions)	\$ 3.7	\$ 1.9	\$ -0-	\$ -0-	\$ 2.4	\$ 2.3			\$	.7 / .7				

DESCRIPTION:

This budget line includes MINE TRAINING ALL TYPES.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)		A. Appropriation/Budget Activity/No. Procurement Ammunition, Army Activity 1. Ammunition			B. WEAPON MODEL/NAME Mine Training All Types (EA0800)			C. MANUFACTURER NAME PLANT CITY/STATE LOCATION			D. DATE FEB 1997	
ELEMENT OF COST	IDENT CODE	FY 96 QTY =		TOTAL (\$000)	FY 97 QTY =		TOTAL (\$000)	FY 98 QTY =		TOTAL (\$000)	FY99 QTY =	
		UNIT COST	QTY		UNIT COST	QTY		UNIT COST	QTY		UNIT COST	QTY
Mine, Practice, M89 Volcano E72190	A	253.43	8	1926								
WAM Individual Trainer E78103	B		100	1819								
WAM Collective Trainer E78104	B					100	1928					
TOTAL P-1 LINE ITEM				3745			1928					

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	A. Appropriation/Budget Activity/No. Procurement, Ammunition, Army Activity 1. Ammunition				B. WEAPON MODEL/NAME Mine AT M87A1 (Volcano) (E72195)				C. MANUFACTURER NAME PLANT CITY/STATE LOCATION Various - CBO				D. DATE February 1997	
	FY 96		QTY = 10		FY 97		QTY = 6		FY 98		QTY = 0		FY 99	
	IDEN CODE	UNIT COST	QTY (EA)	TOTAL (\$000)	UNIT COST	QTY (EA)	TOTAL (\$000)	UNIT COST	QTY (EA)	TOTAL (\$000)	UNIT COST	QTY (EA)	TOTAL (\$000)	
ELEMENT OF COST														
HARDWARE														
LAP (Modified System Contract) Alliant Techsystems, Edina MN	A	2,688.71	10,000	26,887		5,720	12,594							
Coil & Strap Assembly S&K Inc., Ronan MT		103.26	8,400	867	103.26	6,188	639							
Metal Parts Sets		108.29	8,755	948	108.29	1,358	147							
AT S & A Assembly Action Mfg, Philadelphia, PA					30.60	42,000	1,285							
Miscellaneous				64			36							
SUBTOTAL				28,766			14,701							
PRODUCTION SUPPORT														
PRODUCTION ENGINEERING				250			200							
QUALITY ASSURANCE				146			85							
SUBTOTAL				396			285							
TOTAL P-1 LINE ITEM		2,916.20		29,162	2,619.93		14,986							

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY			C. P-1 LINE ITEM NOMENCLATURE				(E72195)				
Procurement, Ammunition, Army Activity 1. Ammunition			Mine AT M87A1 (Volcano)								
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY (each)	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE	
LAP (Modified System Contract)											
FY 96	Alliant Techsystems Edina MN	Option	ARDEC	Sep 96	Nov 97	10,000	2,688.71	YES			
FY97	Alliant Techsystems Edina MN	Option	ARDEC	Feb 97	Mar 98	5,720	2,201.67	YES			
Coil & Strap Assembly											
FY 96	S&K Electronics Inc. Ronan MT	Option	ARDEC	May 96	Mar 97	8,400	103.26	YES			
FY97	S&K Electronics Inc. Ronan MT	Option	ARDEC	Feb 97	Dec 97	6,188	103.26	YES			
Metal Parts Sets											
FY 96	JTM Inc. Amarillo, TX	SS/FP	ARDEC	Sep 96	Jun 97	8,755	\$108.29	YES			
FY 97	JTM Inc. Amarillo, TX	Option	ARDEC	Feb 97	Sep 97	1,358	108.29	YES			
AT S & A Assembly											
FY97	Action Mfg. Philadelphia, PA	Option	ARDEC	Jan 97	May 97	42,000	30.60	YES			
D. REMARKS											
The Modified System Contract includes the anti-tank electronics, bore rider pin release mechanism, third party LAP contract and third party lot acceptance testing.											

[illegible]

BUDGET ITEM JUSTIFICATION RECORD										DATE
APPROPRIATION/BUDGET ACTIVITY										February 1997
Procurement, Ammunition, Army Activity 1. Ammunition										
P-1 ITEM NOMENCLATURE										
Wide Area Munition M93 (E78100)										
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03		
QUANTITY (EA)	106	113	215	304	536	634	1182	1182		
COST (in Millions)	14.6	10.0	15.3	17.9	28.1	31.5	61.0	61.1		
<p>DESCRIPTION :</p> <p>The M93 Wide Area Munition is a first generation smart munition. It weighs 35 pounds and can be transported by a single soldier. It has the capability to recognize armor and heavy truck targets and to autonomously aim and launch its submunition to an effective radius of 100 meters. The M93 is designed for command control of the Arm/Destruct functions. This item has not transitioned to the SMCA and will be procured at actual cost.</p> <p>JUSTIFICATION :</p> <p>The M93 Wide Area Munition supports high mobility/offensive operations. Its design for flexible/rapid deployment combined with cost effective logistics and a self covering minefield capability provides increased performance and lethality over current mines in inventory. The FY1998/FY1999 procurements are required to build war reserve inventory in support of Department of Defense guidance.</p> <p>The date for transition to the SMCA has not been determined.</p> <p>Type Classification Date : June 1996-Low Rate Initial Production (LRIP) Type Classification Date: September 1997-Standard Acquisition Manager: Project Manager for Mines, Countermine and Demolitions (PM-MCD)</p> <p>DD FORM 2454, Jun 88</p>										

P-1 SHOPPING LIST

ITEM NO. 36

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EXHIBIT P-40

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	A. Appropriation/Budget Activity/No. Procurement, Ammunition, Army Activity 1. Ammunition				B. WEAPON MODEL/NAME Wide Area Munition M93 (E78100)				C. MANUFACTURER NAME PLANT CITY/STATE LOCATION Textron Defense, Wilmington, MA				D. DATE February 1997	
	FY 96 QTY = 106		FY 97 QTY = 113		FY 98 QTY = 215		FY 99 QTY = 304							
	IDENT CODE	UNIT COST	QTY (EA)	TOTAL (\$000)	UNIT COST	QTY (EA)	TOTAL (\$000)	UNIT COST	QTY (EA)	TOTAL (\$000)	UNIT COST	QTY (EA)	TOTAL (\$000)	
ELEMENT OF COST														
<u>HARDWARE</u> Wide Area Munition- M93 Complete Textron Defense Systems Wilmington, MA	A	133,710	106	14,173	85,763	113	9,691	69,132	215	14,863	57,086	304	17,354	
SUBTOTAL				14,173			9,691			14,863			17,354	
<u>PRODUCTION SUPPORT</u>														
PRODUCTION ENGINEERING				330			250			400			460	
QUALITY ASSURANCE				78			50			60			77	
SUBTOTAL				408			300			460			537	
TOTAL P-1 LINE ITEM		137,557		14,581	88,416		9,991	71,270		15,323	58,852		17,891	

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY										C. P-1 LINE ITEM NOMENCLATURE	
Procurement, Ammunition, Army Activity 1. Ammunition										Wide Area Munition M93 (E78100)	
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY (each)	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE	
Wide Area Munition-Complete FY 96	Textron Defense Systems Wilmington, MA	SS/FPIF	ARDEC	Jun 96	Feb 98	106	133,710.00	YES			
FY 97	Textron Defense Systems Wilmington, MA	Option	ARDEC	Feb 97	Jul 98	113	85,763.45	YES			
FY 98	Textron Defense Systems Wilmington, MA	Option	ARDEC	Nov 97	Apr 99	215	69,131.67	YES			
FY 99	Textron Defense Systems Wilmington, MA	Option	ARDEC	Nov 98	Apr 00	304	57,086.41	YES			
D. REMARKS											

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY			C. P-1 LINE ITEM NOMENCLATURE					(E78100)			
Procurement, Ammunition, Army Activity 1. Ammunition			Wide Area Munition M93								
LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY (each)	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE	
Wide Area Munition-Complete FY 96	Textron Defense Systems Wilmington, MA	SS/FPIF	ARDEC	Jun 96	Feb 98	106	#####	YES			
FY 97	Textron Defense Systems Wilmington, MA	Option	ARDEC	Feb 97	Jul 98	113	85,763.45	YES			
FY 98	Textron Defense Systems Wilmington, MA	Option	ARDEC	Nov 97	Apr 99	215	69,131.67	YES			
FY 99	Textron Defense Systems Wilmington, MA	Option	ARDEC	Nov 98	Apr 00	304	57,086.41	YES			
D. REMARKS											

[illegible]

[illegible]

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE								February 1997
PROCUREMENT OF AMMUNITION /Ammunition		BUNKER DEFEATING MUNITION (TACTICAL) (E88401)								
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
QUANTITY	2215	1400	0	0	0	0	0	0		
COST (in millions)	14.6	10.0	0.0	0.0	0.0	0.0	0.0	0.0		
<p>DESCRIPTION:</p> <p>The Bunker Defeat Munition Shoulder-Launched Multi-purpose Assault Weapon - Disposable (SMAW-D) is a stand-alone, single shot, disposable munition which is used to defeat earth and timber field fortifications (bunkers). It also defeats light armored vehicles and breaches masonry walls. The need for the BDM SMAW-D was identified during operations Urgent Fury, Just Cause and Desert Shield/Storm. Other systems available (M136, AT4 and the M72, LAV) are ineffective against bunkers. The BDM is light-weight (16.1 lbs.), man-portable and air deployable. The BDM will be used by contingency forces. This item is Code B, not approved for service use. This item has not transitioned to the SMCA and will be procured as actual cost.</p> <p>JUSTIFICATION:</p> <p>The FY 1997 procurement supports contingency forces only. RDT&E funding is not budgeted for to type classify BDM, TC-Standard, approved for service use. Efforts to complete the TC Generic were budgeted in PE 64802.</p> <p>Type Classified (TC) Generic August 1993 & TC LP September 1994</p>										

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)		A. Appropriation Budget Activity Title/No. Procurement Ammunition, ARMY/Activity 1. Ammunition				B. WEAPON BUNKER DEFEATING MUNITION (TACTICAL) (E88401)				C. MANUFACTURER NAME PLANT CITY/STATE LOCATION TALLEY, MESA, AZ				D. DATE February 1997	
Weapon System Cost Elements	Ident. Code	FY96				FY97				FY98				FY99	
		Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Total Cost
HARDWARE	B														
1. COMPLETE ROUND		5806	2,215	12,860	5983	1400	8348								
2. FIELD HANDLING SYSTEM		1504	133	200	2390	81	146								
SUBTOTAL HARDWARE COST				13,060			8,494								
PRODUCTION SUPPORT															
1. ENGINEERING SUPPORT				852			843								
2. QUALITY ASSURANCE				171			171								
3. PROOF & ACCEPTANCE				448			448								
4. INTERIM TRANSPORTATION				50			35								
SUBTOTAL SUPPORT COST				1,521			1,497								
NON-RECURRING COST															
SUBTOTAL NON-RECURRING COST				0			0								
TOTAL P-1 LINE ITEM				14,581			9,991								
PROGRAM UNIT COST				6,582.84			7,136.43								
P-1 SHOPPING LIST Item No. 37 Page 2 of 4												UNCLASSIFIED			
Exhibit P-5 Weapon System Cost Analysis															

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										DATE
B. APPROPRIATION / BUDGET ACTIVITY										February 1997
C. P-1 ITEM NOMENCLATURE										
PROCUREMENT OF AMMUNITION / 1 / Ammunition										
LINE ITEM / FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY Each	UNIT COST \$	SPECS AVAIL NOW	SPEC REV REQ'D	IF YES W/A
1. COMPLETE ROUND										
FY 96	TALLEY, MESA, AZ	SS/FP	ARDEC	Sep-96	Mar-98	2215	5806			
FY 97	TALLEY, MESA, AZ	SS/FP	ARDEC	Mar-97	Sep-98	1400	5963	YES	NO	
2. FIELD HANDLING SYSTEM										
FY 96	TALLEY, MESA, AZ	SS/FP	ARDEC	Sep-96	Sep-97	133	1504			
FY 97	TALLEY, MESA, AZ	SS/FP	ARDEC	Mar-97	Sep-98	61	2390	YES	NO	
REMARKS:										

BUDGET ITEM JUSTIFICATION SHEET

P-1

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY				P-1 ITEM NOMENCLATURE												
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION				ROCKET HYDRA 70 ALL TYPES (E37300)												
	FY	96	FY	97	FY	98	FY	99	FY	00	FY	01	FY	02	FY	03
QUANTITY		-0-		-0-		-0-		-0-		-0-		-0-		-0-		-0-
COST (In Millions)	\$	27.3	\$	26.7	\$	12.1	\$	120.7	\$	123.6	\$	113.4	\$	115.5	129.4	

DESCRIPTION:

This budget line includes Rocket Hydra 70 All Types.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION				ROCKET HYDRA 70 ALL TYPES (E37300)				FEBRUARY 1997							
FY				96		97		98		99					
SSN/ITEM:				QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL			
(E37335) ROCKET HYDRA 70 HE/PD M151/M423				0	0.00	0	0	0.00	0	15	783.39	12067	23	799.70	18504
(E37327) ROCKET HYDRA 70 MPSM HE M261 WHD				0	0.00	0	7	2384.38	16482	0	0.00	0	0	0.00	0
(E37330) ROCKET HYDRA 70 SMOKE M264				4	1650.70	5940	6	1602.84	10229	0	0.00	0	0	0.00	0
(E37334) ROCKET HYDRA 70 MPSM PRAC M267				0	0.00	0	0	0.00	0	0	0.00	0	40	911.11	36330
(E37337) ROCKET HYDRA 70 SIG PRAC M274				46	468.86	21362	0	0.00	0	0	0.00	0	132	500.04	65849
TOTAL P-1 LINE ITEM						27302			26711			12067			120683

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ROCKET HYDRA 70 HE/PD M151/M423

(E37335)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	-0-	15	23	24	20	20/20	
COST (In Millions)	\$ -0-	\$ -0-	\$ 12.1	\$ 18.5	\$ 19.2	\$ 16.6	\$ 17.1/17.5	

DESCRIPTION:

The HYDRA-70 Weapon System is a family of aerial rockets used by Army Aircraft (APACHE, KIOWA WARRIOR, and COBRA) against area targets such as personnel, air defense systems, and materiel. The M151 HEPD is a unitary fragmenting 10 lb anti-personnel warhead with the M423 Point Detonating Fuze. The warhead consists of two main parts, the nose and the base, which is fabricated using nodular pearlitic malleable or ferritic malleable cast iron. The nose end of the warhead is threaded to receive the M423 fuze and is loaded with 2.3 lbs of Composition B4 explosive. The base section is fabricated from steel or cast iron and is threaded for attachment to the MK66 rocket motor. Upon detonation, the warhead fragments into thousands of small, high velocity fragments. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a war reserve item; used only in combat. The FY 98/99 procurement builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

26 February 1982

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1340-01-379-6277

ROCKET HYDRA 70 HE/PD M151/M423

(E37335)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1998 TBS		C/FP	IOC	APR 98	SEP 99	15403	468.04	YES	NO	
FY 1999 TBS		C/FP	IOC	APR 99	SEP 00	23135	477.84			
2. MK90 PROP GRAIN										
FY 1998	HERCULES AEROSPACE RADFORD, VA	SS/CPAF	IOC	MAR 98	AUG 99	16482	194.38	YES	NO	
FY 1999	HERCULES AEROSPACE RADFORD, VA	SS/CPAF	IOC	MAR 99	AUG 00	24755	198.45			

REMARKS:

TBS - To Be Selected

P-1 ITEM NO. 38

PAGE NO. 5 of 25

EXHIBIT P-5A

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ROCKET HYDRA 70 MPSM HE M261 WHD

(E37327)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (THOUSANDS)	-0-	7	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ -0-	\$ 16.5	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION:

The HYDRA 70 Weapon System is a family of aerial rockets used by Army aircraft (APACHE, KIOWA WARRIOR, and COBRA) against area targets such as personnel, air defense systems, and materiel. The M261 Multipurpose Submunition (MPSM) warhead consists of a plastic nose cone assembly, an aluminum warhead case, an expulsion charge, and nine full caliber M73 submunitions with an M439 remote settable fuze. Each submunition has a copper shaped charge liner for armor penetration. The submunitions contain a ram air decelerator (RAD) stabilizing device and 0.2 pounds of Comp B-4 high explosive with the body wall scored internally to optimize fragment size against personnel and materiel. The M439 fuze is remotely set from the aircraft with time to target data. After firing, the fuze functions at the computer determined time to initiate the expulsion charge. Once the submunitions are ejected, the RAD's inflate and the arming sequence starts as the submunitions enter into a near vertical descent over the target area. Each submunition is fuze with an M230 fuze which will function regardless of impact angle. M261 is mated to the MK66 Mod 3 rocket motor and is fired from either the M260 or M261 Light Weight Launcher. This item is Code A; approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a war reserve item; used only in combat. Procurement builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1985

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1DOC4Z

DATE: FEBRUARY 1997
NSN = 1340-01-379-7814
(E37327)

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
P-1 ITEM NOMENCLATURE:
ROCKET HYDRA 70 MPSM HE M261 WHD

		FY 96	(QTY	)	FY 97	(QTY	)	6912	FY 98	(QTY	)	FY 99	(QTY)
ELEMENT OF COST	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT
QM: EACH		COST			COST			COST			COST			COST
HARDWARE														
1.LOAD, ASSEMBLE, AND PACK (LAP)				6912	1758.17	12152								
2.MK90 PROP GRAIN				7396	170.37	1260								
SUBTOTAL						13412								
PRODUCTION SUPPORT														
1.PRODUCTION ENGINEERING						613								
2.QUALITY ASSURANCE						19								
3.ACCEPTANCE TESTING						146								
4.INTERIM TRANSPORTATION						127								
5.INDUSTRIAL STOCK SUPPORT						531								
6.CAWCF GAIN/LOSS SURCHARGE						1633								
SUBTOTAL						3069								

TOTAL P-1 LINE ITEM						2384.38								

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1340-01-379-7814

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ROCKET HYDRA 70 MPSM HE M261 WHD

(E37327)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1997	LOCKHEED MARTIN BURLINGTON, VT	C/FP	IOC	DEC 96	DEC 98	6912	1758.17	YES	NO	
2. MK90 PROP GRAIN										
FY 1997	HERCULES AEROSPACE RADFORD, VA	SS/CPAF	IOC	MAR 97	OCT 98	7396	170.37	YES	NO	

REMARKS:

LOCKHEED-MARTIN ORDNANCE SYSTEM WAS PURCHASED BY GENERAL DYNAMICS
ORDNANCE SYSTEMS IN JAN 97.
FY97 PROGRAM AWARDED AS A PERFORMANCE SPECIFICATION REQUIREMENT CONTRACT.

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ROCKET HYDRA 70 SMOKE M264

(E37330)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	4	6	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions) \$	5.9	10.2	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION:

The HYDRA 70 Weapon System is a family of aerial rockets used by Army aircraft (APACHE, KIOWA WARRIOR, and COBRA) against area targets such as personnel, air defense systems, and materiel. The systems smoke rocket consists of the M264 red phosphorus (RP) warhead and the MK66 Mod 3 rocket motor. The warhead consists of a plastic nose cone assembly, an aluminum warhead case, a remote settable primary fuze (M439) with an umbilical cable, an expulsion charge, and 72 RP wedges. The M264 warhead uses RP because of its stability and improved performance as a screening agent in hot temperature conditions. The M439 fuze is designed to provide longer stand-off range and integration with the M439 range settable fuze. The M439 fuze permits the firing aircraft to remain in defilade and place smoke at ranges up to 6 kilometers. The M264 replaces a similar rocket that consists of a M259 white phosphorus warhead and a MK40 rocket motor. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. Procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

July 1995

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1340-01-289-4719

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

ROCKET HYDRA 70 SMOKE M264

(E37330)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	LOCKHEED MARTIN BURLINGTON, VT	C/FP	IOC	DEC 96	DEC 98	3598	1330.05			
FY 1997	LOCKHEED MARTIN BURLINGTON, VT	C/FP	IOC	DEC 96	JAN 99	6381	1154.90	YES		NO
2. MK90 PROP GRAIN										
FY 1996	HERCULES AEROSPACE RADFORD, VA	SS/CPAF	IOC	MAR 96	NOV 97	3850	172.00			
FY 1997	HERCULES AEROSPACE RADFORD, VA	SS/CPAF	IOC	MAR 97	NOV 98	6828	189.96	YES		NO

REMARKS:

LOCKHEED-MARTIN ORDNANCE SYSTEM WAS PURCHASED BY GENERAL DYNAMICS
ORDNANCE SYSTEMS IN JAN 97.
FY96 AND FY97 PROGRAM AWARDED AS A PERFORMANCE SPECIFICATION
REQUIREMENT CONTRACT.

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ROCKET HYDRA 70 MPSM PRAC M267

(E37334)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	-0-	-0-	-0-	40	40	35		34/40
COST (In Millions)	\$ -0-	\$ -0-	\$ -0-	\$ 36.3	\$ 37.1	\$ 33.0	\$ 33.4/39.8	

DESCRIPTION:

The HYDRA 70 Weapon System is a family of aerial rockets used by Army aircraft (APACHE, KIOWA WARRIOR, and COBRA) against area targets such as personnel, air defense systems, and materiel. The M267 Multi-Purpose Submunition (MPSM) practice round is identical in operation to the M261 tactical warhead except that three M75 practice submunitions, with a flash powder smoke signature, take the place of the nine M73 submunitions. Six inert submunitions are used to complete the weight and balance requirements. The M267 uses the M439 remote fuze, is mated to the MK66 Mod 3 rocket motor with electromagnetic radiation protection, and is required to train with the fire control and rocket management systems on the COBRA and APACHE attack helicopters. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals. The M267 MPSM Practice round provides a cleaner, more effective rocket with which to train pilots.

TYPE CLASSIFICATION DATE:

1982

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1340-01-379-7889

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ROCKET HYDRA 70 MPSP PRAC M267 (E37334)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1995	LOCKHEED MARTIN	C/FP	IOC	NOV 95	FEB 98	42319	404.87			
FY 1999	BURLINGTON, VT	C/FP	IOC	APR 99	FEB 01	39874	573.91			
2. MK90 PROP GRAIN										
FY 1995	HERCULES AEROSPACE	SS/CPAF	IOC	DEC 94	JAN 96	45282	183.37			
FY 1999	RADFORD, VA	C/FP	IOC	MAR 99	AUG 01	42666	198.45			

REMARKS:

TBS - To Be Selected
LOCKHEED-MARTIN ORDNANCE SYSTEM WAS PURCHASED BY GENERAL DYNAMICS
ORDNANCE SYSTEM IN JAN 97.

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL, SYMBOL
DD-COMP (AR) 1092**APPROPRIATION/BUDGET ACTIVITY**

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ROCKET HYDRA 70 MP5M PRAC M267

FISCAL YEAR

FISCAL YEAR

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO MONTHS TO MAX AFTER D-DAY
		MINIMUM	MAXIMUM	
1	LM, BURLINGTON, VT	2.50	5.00	6
2	TO BE SELECTED	2.50	5.00	6

	PROCUREMENT LEAD TIME			
	ADMIN LEAD TIME		PROD.	TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT		
INITIAL	6	7	22	29
REORDER	6	7	22	29

REMARKS	TO ADDENDUM SHEET FOR APPLICABLE REMARKS

QUANTITY IN THOUSANDS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		ROCKET HYDRA 70 SIG PRAC M274 (E37337)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	46	-0-	-0-	132	132	122	122/132	
COST (In Millions)	\$ 21.4	\$ -0-	\$ -0-	\$ 65.8	\$ 67.3	\$ 63.9	\$ 65.0/72.1	

DESCRIPTION:

The HYDRA 70 Weapon System is a family of aerial rockets used by Army aircraft (APACHE, KIOWA WARRIOR, and COBRA) against area targets such as personnel, air defense systems, and materiel. The M274 warhead is a smoke/flash signature practice warhead used for pilot/gunner training missions and consists of a cast iron warhead modified with vent holes; and an aluminum nose cap with firing pin, an M423 fuze safe and arming device; and a smoke/flash cartridge containing a mixture of potassium perchlorate and aluminum powder. The M274 with the new MK66 Mod 3 rocket motor with electromagnetic radiation protection can be fired by all aircraft. It is a key rocket due to its low cost, simple and reliable operation, day and night signature for scoring pilot proficiency, and non-hazardous dud feature which enables usage on new multipurpose range complexes. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. Each pilot must fire live rockets to acquire and maintain attack helicopter gunnery skills. FY 99 procurement supports all training schedules, initial qualification training for aviators, and builds a depot level in accordance with the Army's procurement goals. The M274 Signature Practice Rocket is the preferred training munition at all ranges. The M274 Signature Practice Rocket is safer to use, is cheaper, and has less of an environmental impact than high explosive rockets. At the same time, it allows peacetime training with rockets compatible with the new sterile, instrumented training ranges equipped with advanced sensors.

TYPE CLASSIFICATION DATE:

1986

PCN PO2QM1DOD4Z

PROCUREMENT HISTORY & PLANNING

DATE: FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1340-01-379-7118

ROCKET HYDRA 70 SIG PRAC M274

(E37337)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	LOCKHEED MARTIN BURLINGTON, VT	C/FP	IOC	DEC 96	NOV 98	45561	184.27			
FY 1999 TBS		C/FP	IOC	APR 99	FEB 01	131687	219.17			
2. MK90 PROP GRAIN										
FY 1996	HERCULES AEROSPACE RADFORD, VA	SS/CPAF	IOC	NOV 96	APR 97	48751	172.00			
FY 1999 TBS		C/FP	IOC	DEC 98	SEP 99	140906	198.45			

REMARKS:

TBS - To Be Selected
FY96 PROGRAM AWARDED AS A PERFORMANCE SPECIFICATION REQUIREMENT CONTRACT.
LOCKHEED-MARTIN ORDNANCE SYSTEM WAS PURCHASED BY GENERAL DYNAMICS
ORDNANCE SYSTEMS IN JAN 97.

P-1 ITEM NO. 38

PAGE NO. 23 of 25

EXHIBIT P-5A

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		DEMOLITION MUNITIONS ALL TYPES (E55.400)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 30.4	\$ 23.2	\$ 18.8	\$ 17.9	\$ 45.6	\$ 23.4	\$ 15.9	\$ 16.1

DESCRIPTION:

This budget line includes Demolition Munitions ALL TYPES.

AMMUNITION COST ANALYSIS (Dollars in Thousands)													
APPROPRIATION AND P-1 LINE ITEM PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1.													
AMMUNITION DEMOLITION MUNITIONS ALL TYPES (E55400)													
SSN / ITEM:	FY 96				FY 97				FY 98				FY 99
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST
E50601 CHG DEMO BLK COMP C-4 1-1/4 LB M112	619	18.26	11304	352	26.93	9470	353	37.60	13269	353	38.39	13555	
E51300 CHG DEMO BLK CRATERING 40 LB	16	379.76	5939	0	0.00	0	0	0.00	0	0.00	0	0	0.00
E53200 CHG DEMO SHAPED M3 40 LB	10	242.85	2546	0	0.00	0	0	0.00	0	0.00	0	0	0.00
E54100 CORD DETONATING TYPE I	4260	.20	852	0	0.00	0	15264	.11	1652	9481	.11	1047	
E56801 IGNITER FUSE BLASTING TIME M60	342	3.53	1205	0	0.00	0	0	0.00	0	0.00	0	0	0.00
E60201 CUTTER CTG ACTUATED 2 SEC DELAY M21	0	0.00	0	0	0.00	0	10	66.90	674	0	0.00	0	0.00
E81301 HOLDER FOR BLASTING CAP AND SHOCK TUBE XM9	1637	.43	713	0	0.00	0	0	0.00	0	0.00	0	0	0.00
E81302 CAP BLASTING NON-ELEC W/30 FT SHOCK TUBE XM	912	3.40	3102	0	0.00	0	0	0.00	0	0.00	0	515	3.63
E81303 CAP BLASTING NON-ELEC W/500 FT SHOCK TUBE X	54	18.20	974	115	14.89	1712	0	0.00	0	0.00	0	90	15.99
TOTAL P-1 LINE ITEM													

AMMUNITION COST ANALYSIS (Dollars in Thousands)													
APPROPRIATION AND P-1 LINE ITEM PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION DEMOLITION MUNITIONS ALL TYPES (F55400)										DATE FEBRUARY 1997			
SSN / ITEM:	FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		TOTAL
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	
E81304 CAP BLASTING NON-ELEC W/1000 FT SHOCK TUBE X	15	33.15	498	16	31.44	503	0	0.00	0	0	0.00	0	0
E81305 CAP BLASTING NON-ELEC DELAY XM14	175	8.55	1496	158	9.76	1542	166	9.87	1639	0	0.00	0	0
E81306 CAP BLASTING NON-ELEC DELAY W/30 FT TUBE X	36	7.91	285	0	0.00	0	0	0.00	0	0	0.00	0	0
E81307 IGNITER TIME FUZE AND SHOCK TUBE XM80	288	3.41	981	277	3.75	1039	414	3.35	1387	0	0.00	0	0
E81308 CAP BLASTING INERT NON-ELEC W/500 FT SHOCK T	1536	17.11	26	0	0.00	0	0	0.00	0	0	0.00	0	0
E81309 CAP BLASTING INERT NON-ELECT W/30 FT SHOCK T	71	4.79	340	0	0.00	0	0	0.00	0	0	0.00	0	0
E81310 CAP BLASTING INERT NON-ELEC DELAY	10	9.30	93	11	9.27	102	11	9.27	102	0	0.00	0	0
E81311 CAP BLASTING NON-ELEC W/70 FT SHOCK TU	4	14.92	57	7	7.00	49	5	8.60	43	0	0.00	0	0
TOTAL P-1 LINE ITEM			30411			14417			18766			17910	

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CHG DEMO BLK COMP C-4 1-1/4 LB M112

(E50601)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	619	352	353	353	827	255	-0-/-0-	
COST (In Millions)	\$ 11.3	\$ 9.5	\$ 13.3	\$ 13.6	\$ 32.4	\$ 10.2	\$ -0-/-0-	

DESCRIPTION:

The block demolition charge consists of 1-1/4 pounds of composition C4 plastic explosive packed in a mylar-film bag. Pressure sensitive adhesive tape is provided on one of the rectangular surfaces, allowing quick emplacement by the individual soldier on the object to be destroyed. The explosive may be cut and/or removed from its wrapper and hand molded into a desired shape suited to the target. Upon detonation, the shock wave destroys the target by cutting, breaching or cratering. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

Composition C4 is the primary demolition explosive used by the U.S. Army. This is a training standard item used in both training and combat. FY 98/99 procurement supports annual peacetime training, demilitarization requirements, and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

Prior to 1960.

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QMIDOC4Z

DATE: FEBRUARY 1997
NSN = 1375-01-389-3854
(E50601)APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
P-1 ITEM NOMENCLATURE:
CHG DEMO BLK COMP C-4 1-1/4 LB M112

		FY 96	(QTY	619150)	FY 97	(QTY	351614)	FY 98	(QTY	352880)	FY 99	(QTY	353090)
ELEMENT OF COST		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
QM: EACH			COST			COST			COST			COST	
HARDWARE													
1. LOAD ASSEMBLE, AND PACK (LAP)	619150	3.62	2242		351614	3.31	1162	352880	3.95	1394	353090	4.03	1424
2. COMP C-4 CLASS 3 (LB)	786321	8.44	6638		446550	15.36	6861	448158	22.44	10057	448425	22.91	10274
SUBTOTAL			8880				8023			11451			11698
PRODUCTION SUPPORT													
1. PRODUCTION ENGINEERING			275				335			1170			1195
2. QUALITY ASSURANCE			12				11			29			29
3. ACCEPTANCE TESTING			102				87			132			135
4. INTERIM TRANSPORTATION			34				76			82			84
5. INDUSTRIAL STOCK SUPPORT			378				938			405			414
6. CAWCF GAIN/LOSS SURCHARGE			1623										
SUBTOTAL			2424				1447			1818			1857

TOTAL P-1 LINE ITEM		18.26	11304			26.93	9470		37.60	13269		38.39	13555

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1375-01-389-3854

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CHG DEMO BLK COMP C-4 1-1/4 LB M112 (E50601)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	JUN 96	FEB 98	619150	3.62			
FY 1997	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	DEC 96	OCT 97	351614	3.31	YES	NO	
FY 1998	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	DEC 97	OCT 98	352880	3.95	YES	NO	
FY 1999	MARTIN MARIETTA MILAN, TN	SS/CPAF	IOC	DEC 98	OCT 99	353090	4.03			

REMARKS:

P-1 ITEM NO. 39

PAGE NO.

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EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1375-01-389-3854

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CHG DEMO BLK COMP C-4 1-1/4 LB M112

(E50601)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
2. COMP C-4 CLASS 3 (LB)										
FY 1996	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	DEC 95	JUL 96	786321	8.44			
FY 1997	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	DEC 96	JUL 97	446550	15.36	YES	NO	
FY 1998	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	DEC 97	JUL 98	448158	22.44	YES	NO	
FY 1999	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	DEC 98	JUL 99	448425	22.91			

REMARKS:

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CHG DEMO BLK CRATERING 40 LB

(E51300)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	16	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 5.9	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-

DESCRIPTION:

The 40 lb cratering charge is a cylindrical metal container with approximately 30 pounds of explosive and a TNT booster of approximately 10 pounds in the center portions next to the priming tunnels. The item is primarily used for tactical explosive earthmoving requirements (road cratering) by the individual soldier (Engineer Corps). The charge is packed one per box. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. Procurement supports annual peacetime training and builds war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1958

RCS: DD-COMP(AR)-1092

PCN: P02QM1DOC4Z

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

DATE: FEBRUARY 1997
 NSN = 1375-01-378-9669
 (E51300)

APPROPRIATION BUDGET ACTIVITY
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
 P-1 ITEM NOMENCLATURE:
 CHG DEMO BLK CRATERING 40 LB

ELEMENT OF COST QM: EACH	FY 96		FY 97		FY 98		FY 99		TOTAL	UNIT COST	QTY	TOTAL	UNIT COST	QTY	TOTAL
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST							
HARDWARE															
1. LOAD, ASSEMBLE, AND PACK (LAP)	15638	260.21	4069												
2. *COMP B TYPE I	453502	1.65	749												
3. GRADE A (LB)															
3. ALUMINUM POWDER TYPE III CLASS	125104	0.85	107												
7. GR F (LB)															
4. *TNT TYPE I,	187656	1.50	282												
FLAKE (LB)	31276	6.89	215												
5. COMP D-2 (LB)															
6. COMP A-5, CLASS	7976	6.62	53												
1 (LB)															
SUBTOTAL			5475												
PRODUCTION SUPPORT															
1. PRODUCTION ENGINEERING			170												
2. QUALITY ASSURANCE			8												
3. ACCEPTANCE TESTING			63												
4. INTERIM TRANSPORTATION			21												
5. INDUSTRIAL STOCK SUPPORT			232												
6. CAWCF GAIN/LOSS SURCHARGE			1001												
SUBTOTAL			1495												
NONRECURRING															
1. *GOVERNMENT FURNISHED MATERIAL			-1031												
SUBTOTAL			-1031												

TOTAL P-1 LINE ITEM			379.76												

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1375-01-378-9669

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

CHG DEMO BLK CRATERING 40 LB

(F51300)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	MASON-HANGER SILAS MIDDLETON, IA	SS/CPFF	IOC	JUL 96	JUL 97	15638	260.21			
2. *COMP B TYPE I GRADE A (LB)										
FY 1996	STOCK ISSUE	N/A	N/A	N/A	N/A	453502				
3. ALUMINUM POWDER TYPE III CLASS 7, GR F (LB)										
FY 1996	ALCAN-TOYO AMER NAPERVILLE, IL	C/FP	IOC	DEC 95	JUL 96	125104	0.85			
4. *TNT TYPE I, FLAKE (LB)										
FY 1996	STOCK ISSUE	N/A	N/A	N/A	N/A	187656				
5. COMP D-2 (LB)										
FY 1996	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	DEC 95	JUL 96	31276	6.89			

REMARKS:

P-1 ITEM NO. 39

PAGE NO. 12 of 28

EXHIBIT P-5A

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY P-1 ITEM NOMENCLATURE NSN = 1375-01-378-9669
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CHG DEMO BLK CRATERING 40 LB (E51300)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
6. COMP A-5, CLASS 1 (LB)										
FY 1996	HOLSTON DEFENSE CORP KINGSPORT, TN	SS/CPFF	IOC	DEC 95	JUL 96	7976	6.62			

REMARKS:

BUDGET ITEM JUSTIFICATION SHEET

APPROPRIATION/BUDGET ACTIVITY							DATE		
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION							FEBRUARY 1997		
P-1 ITEM NOMENCLATURE									
CHG DEMO SHAPED M3 40 LB							(E53200)		
QUANTITY (Thousands)	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	
10	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
COST (In Millions)	\$ 2.5	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	

DESCRIPTION:

The 40 LB Shaped Charge is a surface-emplaced explosive demolition charge containing 28.3 pounds of composition B with a 1.7 pound booster of 50/50 Pentolite in a metal container. It is a tapered cylindrical charge having a lined, conical cavity in one end which directs the cone linear material into a narrow jet for penetrating metal, concrete, earth, or other targets. Maximum penetration is obtained when the charge is exploded at a specific distance from the target, called a stand-off. A stand-off is provided by a metal tripod for supporting the charge. It is especially useful against thick, reinforced concrete pavement laid on dense, high strength base courses and will penetrate reinforced concrete to a depth of 5 feet. This charge is packed one to a wooden box. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. The 40 pound cratering charge is the Army's main charge used against reinforced concrete and Armor Plate to blast a hole into which a more powerful explosive can be placed. Procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1967

RCS: DD-COMP(AR)-1092

PCN:P02QM1D0C4Z

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:

DATE: FEBRUARY 1997
NSN = 1375-00-088-6691
(E53200)P-1 ITEM NOMENCLATURE:
CHG DEMO SHAPED M3 40 LB

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

ELEMENT OF COST QM: EACH	FY 96 (QTY		10483)		FY 97 (QTY)		FY 98 (QTY)		FY 99 (QTY)	
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	
HARDWARE																
1.LOAD, ASSEMBLE, AND PACK (LAP)	10483	176.20	1847													
2.*COMP B TYPE I	325445	1.60	520													
3.*COMP A-3 (LB)	1135	2.38	3													
4.*TNT TYPE I, FLAKE (LB)	130178	1.45	189													
SUBTOTAL			2559													
PRODUCTION SUPPORT																
1.PRODUCTION ENGINEERING			79													
2.QUALITY ASSURANCE			20													
3.ACCEPTANCE TESTING			10													
4.INTERIM TRANSPORTATION			109													
5.INDUSTRIAL STOCK SUPPORT			468													
6.CAMCF GAIN/LOSS SURCHARGE			699													
SUBTOTAL																
NONRECURRING																
1.*GOVERNMENT FURNISHED MATERIAL			-712													
SUBTOTAL			-712													

TOTAL P-1 LINE ITEM																
												242.85	2546			

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1375-00-088-6691

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

CHG DEMO SHAPED M3 40 LB

(E53200)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996 TBS		C/FP	IOC	FEB 97	MAY 98	10483	176.20			
2. *COMP B TYPE I GRADE A (LB)										
FY 1996 STOCK ISSUE		N/A	N/A	N/A	N/A	325445				
3. *COMP A-3 (LB)										
FY 1996 STOCK ISSUE		N/A	N/A	N/A	N/A	1185				
4. *TNT TYPE I, FLAKE (LB)										
FY 1996 STOCK ISSUE		N/A	N/A	N/A	N/A	130178				

REMARKS:

TBS - To Be Selected

BUDGET ITEM JUSTIFICATION RECORD						DATE: February 1997		
APPROPRIATION/BUDGET ACTIVITY: PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION			P-1 ITEM NOMENCLATURE: SELECTABLE LTWT ATTACK MUNITION (E52000)					
	FY 96	FY 97	FY 98	FY 99	FY00	FY 01	FY 02	FY 03
QUANTITY (THOUSANDS)	0	9	0	0	0	0	10	10
COST (IN MILLIONS)	0.0	8.8	0.0	0.0	0.0	0.0	9.9	10.0
<p>DESCRIPTION:</p> <p>The Army SLAM is a lightweight (2.2lbs), compact hand emplaced munition offering the user multiple modes of operation. The warhead is an explosively formed penetrator (EFP) to provide a capability to engage and defeat targets from 5 inches to 25 ft. Its 4 modes are bottom attack (magnetic signature), side/top attack (infrared signature), timed demolition and operator-initiated command detonation.</p> <p>JUSTIFICATION:</p> <p>The Army SLAM program is a modified NDI. The SLAM was developed for US SOCOM. This device will be modified by including a self-destruct feature in all electronic modes of operation. The FY97 procurement quantity supports the Army War Reserve Requirement.</p> <p>Type Classification Date: September 1996 Acquisition Manager: Project Manager, Mines Countermine and Demolitions (PM-MCD)</p>								

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)							A. Appropriation/Budget Activity Title/No. Procurement Ammunition, Army/Activity 1.	B. WEAPON MODEL/SERIES POPULAR NAME SELECTABLE LTWT ATTACK MUNITION (E52000)	C. MANUFACTURER NAME ALLIANT TECH SYSTEMS, MN	D. DATE February 1997
Weapon System Cost Elements	Ident. code	FY 96		FY 97		FY 98		FY 99		Total Cost
		Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	
<u>HARDWARE</u>										
Selectable Ltwt Attack Munition XM4	B			800.00	7200					
Trainer Kits - M299	A			1800.00	513					
SUBTOTAL					7713					
<u>PRODUCTION SUPPORT</u>										
1. PRODUCTION ENGINEERING					546					
2. QUALITY ASSURANCE					270					
3. ACCEPTANCE TESTING					253					
SUBTOTAL					1069					
SUBTOTAL										
TOTAL				975.78	8782					

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)										A. DATE February 1997	
B. APPROPRIATION/BUDGET ACTIVITY PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION				C. P-1 ITEM NOMENCLATURE SELECTABLE LTWT ATTACK							
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE	
Selectable Ltwt Attack Munition XM4											
FY 97	Alliant Tech Systems, Mn	C/FP	ARDEC	Mar 97	Jun 98	9000	800.00	YES	-	-	
Trainer Kits - M299											
FY97	Alliant Tech Systems, Mn	C/FP	ARDEC	Mar 97	Jun 98	285	1800.00	YES	-	-	
D. REMARKS											

DD Form 2446-1, JUL 87

Previous editions are obsolete

P-1 SHOPPING LIST

ITEM NO. 39

Exhibit P-5A Procurement History and Planning

BUDGET ITEM JUSTIFICATION RECORD

DATE: February 1997

APPROPRIATION/BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE:

CAP, BLASTING: NON-ELECTRIC, M11 (E81302)

	FY 96	FY 97	FY 98	FY 99	FY00	FY 01	FY 02	FY 03
QUANTITY (THOUSANDS)	912	0	0	515	0	596	0	596
COST (IN MILLIONS)	3.1	0.0	0.0	1.9	0.0	2.3	0.0	2.4

DESCRIPTION:

A nondelay military sized blasting cap which is factory crimped to 30ft. of shock tube. This component will be used to branch firing signals to and initiate explosive and demolition devices. This item has not transitioned to the SMCA and will be procured at actual cost.

JUSTIFICATION:

MDI is a set of components which non-electrically initiates explosives using "shock tube" technology which has been in commercial use for twenty years. The new components are lighter, more reliable and easier to use. In addition, because of a highly competitive commercial market, MDI will be lower in cost than the present components such as M6 and M7 blasting caps, det cord, etc.

Type Classification Date: September 1993-Generic

Type Classification Date: April 1996 - Standard

Acquisition Manager: Project Manager, Mines Countermine and Demolitions (PM-MCD)

WEAPON SYSTEM COST ANALYSIS

EXHIBIT (P-5)

Weapon System Cost Elements		Ident. code	FY 96 Unit Cost	912 Total Cost	FY 97 Unit Cost	0 Total Cost	FY 98 Unit Cost	0 Total Cost	FY 99 Unit Cost	515 Total Cost	D. DATE February 1997
HARDWARE											
1. Cap. Blasting: Non-electric, with 30 ft. shock tube, M11			3.40	3102					3.05	1571	
SUBTOTAL				3102						1571	
PRODUCTION SUPPORT											
1. PRODUCTION ENGINEERING										248	
2. QUALITY ASSURANCE										35	
3. ACCEPTANCE TESTING										15	
SUBTOTAL										298	
SUBTOTAL											
TOTAL			3.40	3102					3.63	1869	

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

A. DATE
February 1997

B. APPROPRIATION/BUDGET ACTIVITY										
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION										
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
1. Cap, Blasting: Non-electric, FY 96 ICI Explosives, Canada FY96 Ensign Bickford, Ct FY99 TBS		Option C/FP C/FP	ARDEC ARDEC ARDEC	Mar 96 Sep 96 Mar 99	Dec 96 Feb 97 Jun 99	300000 612000 515000	3.24 3.48 3.05	YES YES YES	- - -	- - -

D. REMARKS

FY96 PROCUREMENT CONSISTS OF EXERCISE OF MAXIMUM OPTION FOR 300,000 AND A NEW PROCUREMENT FOR THE BALANCE OF 612,000.

DD Form 2446-1, JUL 87

Previous editions are obsolete

P-1 SHOPPING LIST

ITEM NO. 39

E xhibit P-5A Procurement History and Planning

PAGE 26 of 28

P-1 ITEM NOMENCLATURE	Date
CAP, BLASTING: NON-ELECTRIC, M11 (E81302)	February 1997

February 1997

DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST PAGE 27 of 28 Exhibit P-21 Production Schedule

BUDGET ITEM JUSTIFICATION SHEET

DATE							FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE			
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION							GRENADES ALL TYPES (E34000)			
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03		
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-		
COST (In Millions)	\$ 23.9	\$ 4.2	\$ 14.6	\$ 15.5	\$ 22.6	\$ 20.0	\$ 1.7	1.6		

DESCRIPTION:

This budget line includes Grenades ALL TYPES.

PROCUREMENT AMMUNITION ARMY/			A APPN/ BUDGET ACTIVITY TITLE/NO			B WEAPON			C MANUFACTURER NAME To Be Selected (TBS)			D DATE FEBRUARY 1997		
ACTIVITY 1 Cost Elements			PAA			GRENADES, ALL TYPES								
ID	CD		FY 96			FY 97			FY 98			FY 99		
			TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
(E31900)		Fuze Grenade Hand Prac, M228	10491	3330	3.15							2000	808	2.48
(E34002)		Grenade Hand Smoke Yellow, M18	1291	40089	32.20				2456	77001		3195	98129	32.56
(E34004)		Grenade Hand Smoke Violet, M18	570						1377	43161		1509	46328	32.57
(E69300)		Grenade Hand Smoke Tng, M83	11587	348179	33.28				9168	236891		8176	206924	39.51
(E00500)		Grenade Smoke Screening Tng, M82										600	14	43
(F47700)		Grenade, Launcher, Smk Screening, XM90							1636	28047		37.97		
TOTAL			23939			4164			14637			15480		

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		FUZE GRENADE HAND PRAC M228 (E31900)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	3331	-0-	-0-	808	2094	1325	-0-	-0-
COST (In Millions)	\$ 10.5	\$ -0-	\$ -0-	\$ 2.0	\$ 5.3	\$ 3.4	\$ -0-	\$ -0-

DESCRIPTION:

The M228 fuze is a pyrotechnic delay-igniting fuze used with the M69 delay practice hand grenade. It is used by the individual soldier for training purposes. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1971

RCS: DD-COMP (AR) -1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)
APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

PCN: P02QM1DOC4Z

DATE: FEBRUARY 1997
NSN = 1330-00-168-5502
(E31900)

P-1 ITEM NOMENCLATURE:
FUZE GRENADE HAND PRAC M228

ELEMENT OF COST QM: EACH	FY 96		FY 97		FY 98		FY 99		808470)	
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY
HARDWARE										
1. COMPLETE ROUND	3330704	2.47	8241				808470	2.13	1726	
SUBTOTAL			8241						1726	
PRODUCTION SUPPORT										
1. PRODUCTION ENGINEERING			255							176
2. QUALITY ASSURANCE			12							4
3. ACCEPTANCE TESTING			95							20
4. INTERIM TRANSPORTATION			31							12
5. INDUSTRIAL STOCK SUPPORT			351							62
6. CAWCF GAIN/LOSS SURCHARGE			1506							
SUBTOTAL			2250							274

TOTAL P-1 LINE ITEM		3.15	10491					2.47	2000	

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1330-00-168-5502

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FUZE GRENADE HAND PRAC M228

(E31900)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YRS WHEN AVAIL
1. COMPLETE ROUND										
FY 1996	MARTIN ELECTRONICS	C/FP	IOC	SEP 96	DEC 96	3330704	2.47			
FY 1999	TBS	C/FP	IOC	MAR 99	DEC 99	808470	2.13			

REMARKS:

TBS - To Be Selected

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

GRENADE HAND SMK YELLOW M18

(E34002)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	40	-0-	77	98	103	103	-0-/-0-	
COST (In Millions)	\$ 1.3	\$ -0-	\$ 2.5	\$ 3.2	\$ 3.4	\$ 3.5	\$ -0-/-0-	

DESCRIPTION:

The M18 Yellow Smoke Hand Grenade is used for ground to air or ground to ground signaling. Each grenade emits smoke for approximately 50 to 90 seconds. The body is made of thin sheet metal and is filled with yellow smoke composition. The filler is topped with a starter mixture utilizing the M201A1 fuze. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. FY 98/99 procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1943

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1D0043

DATE: FEBRUARY 1997
 NSN = 1330-00-289-6854
 (E34002)

APPROPRIATION BUDGET ACTIVITY
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
 P-1 ITEM NOMENCLATURE:
 GRENADE HAND SMOKE YELLOW M18

		FY 96	(QTY	40089)	FY 97	(QTY	FY 98	(QTY	77011)	FY 99	(QTY	98129)
ELEMENT OF COST		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT
QM: EACH			COST			COST			COST			TOTAL
HARDWARE												
1. LOAD ASSEMBLY, AND PACK (LAP)		40089	25.29	1014								
2. NITROCELLULOSE WW GR D (LB)		33	7.97					77011	27.52	2119	98129	28.09
SUBTOTAL				1014				62	4.04		79	4.12
										2119		2757
PRODUCTION SUPPORT												
1. PRODUCTION ENGINEERING				31								282
2. QUALITY ASSURANCE				1								7
3. ACCEPTANCE TESTING				12								32
4. INTERIM TRANSPORTATION				4								20
5. INDUSTRIAL STOCK SUPPORT				44								97
6. CAWCF GAIN/LOSS SURCHARGE				185								
SUBTOTAL				277						337		438
TOTAL P-1 LINE ITEM			32.20	1291					31.89	2456		32.56
												3195

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE

NSN = 1330-00-289-6854

(E34002)

GRENAD HAND SMOKE YELLOW M18

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	PINE BLUFF ARSENAL	SS/FP	IOC	MAY 96	APR 97	40089	25.29			
	PINE BLUFF, AR									
FY 1998	PINE BLUFF ARSENAL	SS/FP	IOC	MAR 98	APR 99	77011	27.52	YES	NO	
	PINE BLUFF, AR									
FY 1999	PINE BLUFF ARSENAL	SS/FP	IOC	MAR 99	APR 00	98129	28.09			
	PINE BLUFF, AR									
2. NITROCELLULOSE WW GR D (LB)										
FY 1996	HERCULES AEROSPACE	SS/CPAF	IOC	JAN 96	MAR 97	33	7.97			
	RADFORD, VA									
FY 1998	HERCULES AEROSPACE	SS/CPAF	IOC	JAN 98	MAR 99	62	4.04	YES	NO	
	RADFORD, VA									
FY 1999	HERCULES AEROSPACE	SS/CPAF	IOC	JAN 99	MAR 00	79	4.12			
	RADFORD, VA									

REMARKS:

P-1 ITEM NO. 40

PAGE NO. 10 of 17

EXHIBIT P-5A

(EXHIBIT P-21)

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1062

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

GRENADA HAND SMOKE YELLOW M18

FISCAL YEAR	FISCAL YEAR
-------------	-------------

FISCAL YEAR

E34002

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES			MONTHS TO REACH MAX AFTER D-DAY
		MINIMUM SUST.	1-8-5	MAXIMUM	
1	PINE BLUFF ARS, AR	60.00	7.50	288.0	0

	PROCUREMENT LEAD TIME		
	ADMIN LEAD TIME PRIOR 1 OCT	AFTER 1 OCT	TOTAL AFTER 1 OCT
INITIAL	6	6	19
REORDER	6	6	19

REMARKS

QUANTITY IN THOUSANDS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

GRENADE HAND SMOKE TNG M83

(E69300)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	348	122	237	207	210	211	-0-/-0-	-0-/-0-
COST (In Millions)	\$ 11.6	\$ 4.2	\$ 9.2	\$ 8.2	\$ 8.5	\$ 8.7	\$ -0-/-0-	\$ -0-/-0-

DESCRIPTION:

The M83 hand grenade contains approximately 1 pound of environmentally acceptable smoke mixture. The smoke mixture is initiated by a pyrotechnic delay-igniting fuze. After initiation, there is a 3 second delay after which a dense smoke cloud is produced to conceal troop, vehicle, or other march movements. The M83 training grenade is deployed in a similar manner as the M8 series of service smoke grenades. It is used by the individual soldier in squad, company, and battalion units. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. This grenade is urgently needed to replace the current M8 HC filled munition with a training safe version to reduce the hazard of troop exposure carcinogenic HC smoke. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1994

RCS: DD-COMP(AR)-1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN:P02QM1DOC45

APPROPRIATION BUDGET ACTIVITY
 PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
 P-1 ITEM NOMENCLATURE:
 GRENADE HAND SMOKE TNG M83

DATE: FEBRUARY 1997
 NSN = 1330-01-380-0287
 (F69300)

		FY 96	(QTY	348179)	FY 97	(QTY	122217)	FY 98	(QTY	236891)	FY 99	(QTY	206924)
ELEMENT OF COST		QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
QM: EACH													
HARDWARE													
1. LOAD, ASSEMBLE, AND PACK (LAP)		348179	30.53	10628	122217	27.73	3389	236891	33.39	7911	206924	34.09	7055
2. NITROCELLULOSE WW GR D								261	4.04	1	228	4.12	1
SUBTOTAL				10628			3389			7912			7056
PRODUCTION SUPPORT													
1. PRODUCTION ENGINEERING				329			155			809			721
2. QUALITY ASSURANCE				15			5			20			18
3. ACCEPTANCE TESTING				122			37			91			81
4. INTERIM TRANSPORTATION				40			32			57			51
5. INDUSTRIAL STOCK SUPPORT				453			133			279			249
6. CAWCF GAIN/LOSS SURCHARGE							413						
SUBTOTAL				959			775			1256			1120

TOTAL P-1 LINE ITEM			33.28	11587		34.07	4164		38.70	9168		39.51	8176

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

NSN = 1330-01-380-0287

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

GRENADE HAND SMOKE TNG M83

(E69300)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL.
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	PINE BLUFF ARSENAL	SS/FP	IOC	MAR 96	APR 97	348179	30.53			
FY 1997	PINE BLUFF, AR	SS/FP	IOC	MAR 97	APR 98	122217	27.73	YES	NO	
FY 1998	PINE BLUFF, AR	SS/FP	IOC	MAR 98	APR 99	236891	33.39	YES	NO	
FY 1999	PINE BLUFF, AR	SS/FP	IOC	MAR 99	APR 00	206924	34.09			
2. NITROCELLULOSE WW GR D										
FY 1998	HERCULES AEROSPACE	SS/CPAF	IOC	JAN 98	MAR 99	261	4.04	YES	NO	
FY 1999	HERCULES AEROSPACE	SS/CPAF	IOC	JAN 99	MAR 00	228	4.12			

REMARKS:

P-1 ITEM NO. 40 PAGE NO. 15 of 17

EXHIBIT P-5A

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1002**APPROPRIATION/BUDGET ACTIVITY**

P-1 ITEM NOMENCLATURE

P-1 ITEM NOMENCLATURE
GRENADE HAND SMOKE TNG M83

[illegible]

EAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES			MONTHS TO REACH MAX AFTER D-DAY
		MINIMUM	1-8-5	MAXIMUM	
1	PINE BLUFF ARS, AR	56.00	7.00	268.8	5

PROCUREMENT LEAD TIME				
	ADMIN LEADTIME		PROD.	TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT		
INITIAL	6	6	13	19
REORDER	6	6	13	19

REMARKS

QUANTITY IN THOUSANDS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE SIGNALS ALL TYPES (E46900)						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02 FY 03
QUANTITY		-0-	-0-	-0-	-0-	-0-	-0-	-0-/-0-
COST (In Millions)	\$	17.8	\$ 1.3	\$ 7.9	\$ 8.4	\$ 14.3	\$ 15.7	\$.7/.7

DESCRIPTION:

This budget line includes Signals ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION SIGNALS ALL TYPES (E46900)									
DATE									
FEBRUARY 1997									
SSN/ITEM:	FY 96		FY 97		FY 98		FY 99		TOTAL
	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	
(E44600) SIGNAL KIT PERSONNEL DISTRESS RED FP	33	91.00	2959	0	0.00	0	0	0.00	0
(E45800) SIGNAL SMOKE & ILLUM MK124 MOD 0	0	0.00	0	8	38.79	320	0	0.00	455
(E46500) SIGNAL ILLUM GND WS CLUSTER M159	40	43.76	1750	0	0.00	0	23	48.35	1127
(E46800) SIG ILLUM GND WS PARA M127A1	60	44.17	2653	10	36.82	355	52	41.87	2156
(E47000) SIGNAL ILLUM GND CLUSTER M125A1	34	43.76	1507	0	0.00	0	26	42.74	1125
(E49200) FLARE SURFACE TRIP M49 SERIES	0	0.00	0	26	20.69	537	19	30.92	587
(E62900) SMOKE POT PRACTICE M8	23	388.39	8933	0	0.00	69	7	417.00	2919
TOTAL P-1 LINE ITEM			17802			1281			8369

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		SIGNAL KIT PERSONNEL DISTRESS RED FP (E44600)									
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03			
QUANTITY (Thousands)	33	-0-	-0-	-0-	-0-	26	-0-	-0-			
COST (In Millions)	\$ 3.0	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 1.7	\$ -0-	\$ -0-			

DESCRIPTION:

This kit consists of one hand-held projector and 7 aluminum-bodied red illuminant signals. Configured in a plastic bandoleer, this signal is approximately 2.5 inches in length and contains a rocket assist motor for maximum penetration through foliage. Firing is accomplished through activation of a firing pin contained in the projector. A light intensity of 3,500 candlepower is achieved for 7 seconds at approximately 500 feet. This item is used by downed air crews for surface-to-air distress signalling. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. Procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

None, this item is procured as a component of the air crew survival vest, SRU-21/P, which was type classified standard in March 1974.

RCS: DD-COMP (AR) - 1092

AMMUNITION COST ANALYSIS (DOLLARS IN: THOUSANDS)

PCN: P02QM1DOC4Z

APPROPRIATION BUDGET ACTIVITY
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION
P-1 ITEM NOMENCLATURE:
SIGNAL KIT PERSONNEL DISTRESS RED FP

DATE: FEBRUARY 1997
NSN = 1370-00-490-7362
(F44600)

		FY 96	(QTY	32516)	FY 97	(QTY	FY 98	(QTY	FY 99	(QTY		
ELEMENT OF COST	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
HARDWARE												
1. COMPLETE ROUND	32516	73.27	2382									
SUBTOTAL			2382									
PRODUCTION SUPPORT												
1. QUALITY ASSURANCE			3									
2. ACCEPTANCE TESTING			27									
3. INTERIM TRANSPORTATION			9									
4. INDUSTRIAL STOCK SUPPORT			102									
5. CAWCF GAIN/LOSS SURCHARGE			436									
SUBTOTAL			577									

TOTAL P-1 LINE ITEM		91.00	2959									

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1370-00-490-7362

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

SIGNAL KIT PERSONNEL DISTRESS RED FP (E44600)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YRS WHEN AVAIL
1. COMPLETE ROUND										
FY 1996	SECURITY SIGNALS INC CORDOVA, TN	C/FP	IOC	JUL 96	JUN 97	32516	73.27			

REMARKS:

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

SIGNAL ILLUM GND WS PARA M127A1

(E46800)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	60	10	44	52	67	67	-0-/-0-	-0-/-0-
COST (In Millions)	\$ 2.7	\$.4	\$ 1.8	\$ 2.2	\$ 2.9	\$ 2.9	\$ -0-/-0-	\$ -0-/-0-

DESCRIPTION:

This signal consists of a parachute suspended illuminant assembly, and a rocket motor propulsion assembly contained in a hand-held aluminum launching tube, deployed by the individual soldier. The base of the launching tube contains a primer and an initiating charge. Stabilizing fins on the rocket are folded parallel to the axis of the signal. The burning time is 40 seconds and candlepower is 125,000. Pyrotechnic charge is illuminant composition. Initiation charge, propelling charge, and expelling charge consist of black powder. The length is 10.16 inches and diameter is 1.67 inches. This signal is packed 36 each per wooden box. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training standard item used in both training and combat. FY 98/99 procurement supports annual peacetime training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1961

PCN PO2QM1DOD4Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

NSN = 1370-01-341-5159

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

SIGNAL ILLUM GND WS PARA M127A1

(E46800)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	SECURITY SIGNALS INC	C/FP	IOC	AUG 96	AUG 97	60062	33.94			
FY 1997	TBS	C/FP	IOC	AUG 97	AUG 98	9645	30.53	YES	NO	
FY 1998	TBS	C/FP	IOC	MAR 98	MAR 99	43968	34.51	YES	NO	
FY 1999	TBS	C/FP	IOC	MAR 99	MAR 00	51498	35.23			
2. BOX METAL M548										
FY 1996	CONCO INC	C/FP	IOC	JUN 96	DEC 96	2529	18.12			
FY 1997	TBS	C/FP	IOC	MAR 97	JAN 98	407	15.12	YES	NO	
FY 1998	TBS	C/FP	IOC	MAR 98	JAN 99	1852	20.89	YES	NO	
FY 1999	TBS	C/FP	IOC	MAR 99	JAN 00	2169	21.33			

REMARKS:

TBS - To Be Selected

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL.
DD-COMP (AR) 1002**APPROPRIATION/BUDGET ACTIVITY**

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

SIGNAL TILUM GND WS PARA M127A1

FISCAL YEAR		
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FISCAL YEAR	FISCAL YEAR
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FISCAL YEAR

E46800

[illegible]

FAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MOVING TO REACH MAX AFTER D-DAY
		MINIMUM SUST.	1-2-5 MAXIMUM	
1	TO BE SELECTED	9.00	30.00	0
2	SECURITY SIGNALS, TN	9.00	30.00	0

	PROCUREMENT LEAD TIME			
	PRIOR 1 OCT	AFTER 1 OCT	PROD.	TOTAL AFTER 1 OCT
INITIAL	6	6	12	18
REORDER	6	6	12	18

REMARKS

QUANTITY IN THOUSANDS

UNCLASSIFIED										DATE	
BUDGET ITEM JUSTIFICATION SHEET										FEB 1997	
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092		P-1 ITEM NOMENCLATURE: SMOKE POT, FLOATING, TA, PRACTICE, M8									
APPROPRIATION /BUDGET ACTIVITY Procurement Ammunition, Army/Activity 1											
		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03		
QUANTITY (THOUSANDS)		21344	0	12058	6523	15275	16241	0	0		
COST (IN MILLIONS)		8.9	0.0	5.3	2.9	7.0	7.6	0.0	0.0		
<p>DESCRIPTION: The M8 Smoke Pot is a five-gallon metal pail containing about 25 pounds of environmentally acceptable smoke mixture. It is initiated by a pyrotechnic delay igniting fuze. After initiation, about a 25 second delay, a dense smoke cloud is produced for screening purposes to conceal troop, vehicle, or other march movements. It is deployed in a similar manner as the service smoke pots, M4 series and M5. It is used by the individual soldier in squad, company and battalion units. This item is code A, approved for service use.</p> <p>JUSTIFICATION: This training pot is urgently needed to replace the current M4A2 HC filled munition with a training munition with a reduced hazard for troops exposed during training.</p> <p>TYPE CLASSIFICATION DATE: October 1994</p>											
DD Form 2454, Jul 88		P-1 SHOPPING LIST				UNCLASSIFIED		Page of Pages EXHIBIT P-40			
ITEM NO 41		PAGE NO 13		OF 17							

UNCLASSIFIED															
REPORTS CONTROL SYMBOL				BUDGET ITEM JUSTIFICATION SHEET						DATE		FEB 97			
DD-COMP(AR) 1092				P-1 ITEM NOMENCLATURE								SMOKE POT, FLOATING, TA, PRACTICE, M8 E62900			
APPROPRIATION /BUDGET ACTIVITY				Procurement Ammunition, Army/Activity 1											
				TOTAL COST IN THOUSANDS OF DOLLARS											
				FY96 Qty; UNIT COST		FY97 Qty; UNIT COST		FY98 Qty; UNIT COST		FY99 Qty; UNIT COST					
IDENT CODE															
Weapon System Cost Elements															
HARDWARE (SPECIFY BY MAJOR COMP)															
Load, Assemble, and Pack				127.83	2728			133.70	1612	136.68	892				
Chemicals				127.81	2837			133.68	1676	136.66	927				
Metal Parts				119.34	2649			124.82	1565	127.60	866				
SUBTOTAL HARDWARE				384.87	8215			402.54	4854	411.50	2684				
PROCUREMENT SUPPORT															
1. Production Engineering				11.63	248			12.17	147	12.44	81				
2. Quality Assurance				0.51	11			0.54	6	0.55	4				
3. Proof & Acceptance Testing				4.33	92			4.53	55	4.63	30				
4. Intrim Transportation				1.40	30			1.47	18	1.50	10				
5. Industrial Stock Support				15.76	336			16.49	199	16.86	110				
5. CAWCF Gain/Loss Surcharge															
SUBTOTAL PROCUREMENT SUPPORT				33.65	718			35.19	424	35.98	235				
NONRECURRING (SPECIFY)															
SUBTOTAL NONRECURRING															
TOTAL				418.52	8933			437.73	5278	447.48	2919				
-1 SHOPPING LIST										UNCLASSIFIED		Page			
ITEM NO		41		PAGE NO		14		OF		17		EXHIBIT P-5			

UNCLASSIFIED										DATE	FEB 1997	
BUDGET ITEM JUS										BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT		
P-1 ITEM NOMENCLATURE										SMOKE POT, FLOATING, TA, PRACTICE, M8		
CONTRACTOR										P-1 SHOPPING LIST		
CONTRACT METHOD										PAGE NO 15 OF 17		
CONTRACTED										UNCLASSIFIED		
AWARD DATE										Page of Pages		
DATE OF FIRST DELIVERY										EXHIBIT P-5A		
QUANTITY												
UNIT COST												
SPECS AVAILABLE NOW												
SPEC REV REQ'D												
IF YES, WHEN AVAILABLE												
REPORTS CONTROL SYMBOL												
DD-COMP(AR) 1092												
BUDGET ACTIVITY												
Procurement Ammunition, Army/Activity 1												
COST ELEMENT/ FISCAL YEAR												
FY96												
Load Assemble and Pack Chemicals Metal Parts												
FY98												
Load Assemble and Pack Chemicals Metal Parts												
FY99												
Load Assemble and Pack Chemicals Metal Parts												
REMARKS												

[illegible]

[illegible]

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

SIMULATORS ALL TYPES

(E51200)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 3.3	\$ 2.8	\$ 4.6	\$ 6.0	\$ 5.6	\$ 8.6	\$ 3.8/2.1	

DESCRIPTION:

This budget line includes Simulators ALL TYPES.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION									
SIMULATORS ALL TYPES (E51200)									
DATE									
FEBRUARY 1997									
FY									
96									
FY									
97									
FY									
98									
FY									
99									
FY									
SSN/ITEM:	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
(E48400) SIMULATOR PROJ AIRBURST M74	0	0.00	0	0	0.00	0	21	15.00	314
(E49700) SIMULATOR PROJ GND BURST M115A2	308	7.76	2390	256	5.28	1352	435	5.92	2574
(E50200) SIMULATOR HAND GRENADE M116A1	233	4.10	955	69	3.20	221	182	3.59	654
(E88000) SIMULATOR TARGET HIT M25	0	0.00	0	35	9.91	348	33	10.18	341
(E88100) SIMULATOR TARGET KILL M26	0	0.00	0	0	0.00	0	46	15.16	690
(E88200) SIMULATOR ANTITANK M27	0	0.00	0	10	81.87	848	0	0.00	0
TOTAL P-1 LINE ITEM			3345			2769			4573
									5962

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		SIMULATOR PROJ GND BURST M115A2 (E49700)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY (Thousands)	308	256	435	341	465	464	-0-/-0-	
COST (In Millions)	\$ 2.4	\$ 1.4	\$ 2.6	\$ 2.1	\$ 2.9	\$ 2.9	\$ -0-/-0-	

DESCRIPTION:

This item simulates battle noises and effects of shell in-flight and ground explosions. The body of the simulator consists of a cylindrical paper tube containing a photoflash and a whistle assembly. The M115A2 simulator is a hand-thrown device actuated by a pullcord igniter. A safety fuze provides a 6 to 10 second delay before igniting the whistle composition in the whistle assembly. The final burning is accomplished by ignition of the photoflash charge effecting flash and a loud report. Dimensions of the M115A1 Simulator: 7.13 inches x 2.33 inches; weight: 3 pounds. This simulator is packed 100 each per wooden box. This item is Code A, approved for service use. This item will be procured through the CAWCF at a fixed standard price.

JUSTIFICATION:

This is a training unique item; not used in combat. FY 98/99 procurement supports annual peacetime training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE:

1960

PCN PO2QM1D04Z

DATE: FEBRUARY 1997

PROCUREMENT HISTORY & PLANNING

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE NSN = 1370-00-752-8126

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

SIMULATOR PROJ GND BURST M115A2 (E49700)

LINE ITEM/ FISCAL YEAR	CONTRACTOR	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAIL NOW	SPEC REV REQD	IF YES WHEN AVAIL
1. LOAD, ASSEMBLE, AND PACK (LAP)										
FY 1996	LANCE ORDNANCE MAYO, FL	C/FP	IOC	JUN 96	NOV 96	308069	6.09			
FY 1997	TBS	C/FP	IOC	AUG 97	AUG 98	255996	4.48	YES	NO	
FY 1998	TBS	C/FP	IOC	MAR 98	MAR 99	434775	5.11	YES	NO	
FY 1999	TBS	C/FP	IOC	MAR 99	MAR 00	341472	5.22			
2. *FUZE POWDER, TYPE I (LB)										
FY 1996	STOCK ISSUE	N/A	N/A	N/A	N/A	68	N/A	N/A	N/A	
FY 1997	STOCK ISSUE	N/A	N/A	N/A	N/A	57	N/A	N/A	N/A	
FY 1998	STOCK ISSUE	N/A	N/A	N/A	N/A	96	N/A	N/A	N/A	
FY 1999	STOCK ISSUE	N/A	N/A	N/A	N/A	76	N/A	N/A	N/A	

REMARKS:

TBS - To Be Selected

PRODUCTION SCHEDULE (EXHIBIT P-21)

DATE FEBRUARY 1997

REQUIREMENTS CONTROL SYMBOL
DD-COMP (AR) 1092

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE:

P-1 ITEM NOMENCLATURE
SIMULATOR PROJ GND BURST M115A2

TY
ACTIVITY 1. AMMUNITION

P-1 ITEM NOMENCLATURE
SIMULATOR PROJ GND BURST M115A2

E49700

[illegible]

PAC NO.	MANUFACTURER NAME & LOCATION	PRODUCTION RATES		MONTHS TO REACH MAX AFTER D-DAY
		MINIMUM SUST.	1-8-5 MAXIMUM	
1	CAMDEN ORD	25.00	53.00	0
2	TO BE SELECTED	25.00	53.00	0
3	LANCE ORDINANCE, FL	25.00	53.00	0

PROCUREMENT LEAD TIME				
	ADMIN LEADTIME		PROD.	TOTAL AFTER 1 OCT
	PRIOR 1 OCT	AFTER 1 OCT		
INITIAL	6	6	12	18
REORDER	6	6	12	18

REMARKS.

QUANTITY IN THOUSANDS

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

AMMO COMPONENTS ALL TYPES

(EB0016)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 2.1	\$ 4.9	\$ 4.8	\$ 7.1	\$ 6.8	\$ 6.8	\$ 6.9	7.1

DESCRIPTION:

This budget line includes all Ammo Components/Support items.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION AMMO COMPONENTS ALL TYPES (EB0016)

DATE

SSN/ITEM:	96			97			98			99		
	FY	QTY	UNIT COST	TOTAL	FY	QTY	UNIT COST	TOTAL	FY	QTY	UNIT COST	TOTAL
COMPONENTS FOR RENOVATION OF FIELD STOCK (EA0500)	0	0.00	543	0	0.00	3856	0	0.00	4728	0	0.00	6019
WEAPON COMP IN SPT OF PROOF/ACPT TESTING (EA1200)	0	0.00	1592	0	0.00	1060	0	0.00	95	0	0.00	1015
TOTAL P-1 LINE ITEM			2135			4916			4823			7054

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE						
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		COMPONENTS FOR RENOVATION OF FIELD STOCK (EA0500)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$.5	\$ 3.9	\$ 4.7	\$ 6.0	\$ 5.8	\$ 5.7	\$	5.9/6.0

DESCRIPTION:

These components are used to support the renovation of ammunition items currently in the Army inventory. All components are centrally managed and procured by U.S. Army Armament, Munitions and Chemical Command. Items support worldwide ammunition requirements in order to maintain the inventory in a serviceable status ready for issue to the troops.

JUSTIFICATION:

The requirements determination takes into consideration the need for the end item to which the component applies, the capability and the capacity of the workforce to apply the component and the capability of the storage, distribution and transportation system to move the end item and component if necessary. The components are required to bring stocks that are no longer in an issuable condition back to an issuable condition. The alternative is to fill requirements with new procurement. It is much more cost effective to correct most stockpile deficiencies through renovation than through new procurement.

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

WEAPON COMP IN SPT OF PROOF/ACPT TESTING

(EAL200)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 1.6	\$ 1.1	\$.1	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.0	\$ 1.0

DESCRIPTION:

This funding line procures weapons and weapons components required by the U.S. Army Test and Evaluation Command (TECOM) in support of ammunition testing. These components are requisitioned from the Army Stock Fund on a reimbursable basis. Required components include mounts, tubes, breech assemblies, and other main weapon components that are not supportable by requisition objectives at test activity locations.

JUSTIFICATION:

These weapon components are required to support proof and acceptance testing at various Army Proving Grounds. Without these components, the Army would be unable to conduct the testing required to accept ammunition end items into its inventory.

BUDGET ITEM JUSTIFICATION SHEET

DATE FEBRUARY 1997						
P-1 ITEM NOMENCLATURE (EA0003)						
APPROPRIATION/BUDGET ACTIVITY PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION CAD/PAD ALL TYPES						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 1.5	\$ 3.8	\$ 1.1	\$ 2.0	\$ 3.1	\$ 4.6
						\$ 5.4/5.9

DESCRIPTION:

Cartridge Actuated Devices (CAD) and Propellant Actuated Devices (PAD) are used in various escape and jettison systems on all types of Army aircraft.

JUSTIFICATION:

Required to support aircraft escape and jettison systems and mission essential needs. Items are subject to shelf and service life restrictions and therefore require replacement at specified intervals. FY 98/99 procurement is required to assure availability of replacement items when needed and avoids grounding aircraft or rendering aircraft partially mission capable.

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE													
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION		ITEMS LESS THAN \$2 MILLION (EA0055)													
	FY	96	FY	97	FY	98	FY	99	FY	00	FY	01	02	FY	03
QUANTITY		-0-		-0-		-0-		-0-		-0-		-0-		-0-	-0-
COST (In Millions)	\$	1.2	\$	.7	\$	.8	\$	.8	\$	.7	\$	.8	\$	.6	.6

DESCRIPTION:

This budget line includes miscellaneous ammunition items less than \$2 million.

AMMUNITION COST ANALYSIS (DOLLARS IN THOUSANDS)

APPROPRIATION BUDGET ACTIVITY:									
PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION ITEMS LESS THAN \$2MILLION (EA0055)									
DATE									
FEBRUARY 1997									
FY 96 FY 97 FY 98 FY 99									
SSN/ITEM:	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL
(E00100) CTG 10 GAUGE BLANK	49	0.59	29	0	0.00	0	49	0.57	28
(E01700) CTG CAL .22 LR MATCH F/PISTOL	1200	0.13	156	0	0.00	0	1855	0.13	235
(E05000) CTG CAL .38 SPEC BALL M41	0	0.00	0	0	0.00	0	0	0.00	0
(E42400) RIOT CONTROL AGENT CS CAPSULE	0	0.00	408	0	0.00	0	0	0.00	0
(EA0960) USAMTU FT BENNING	0	0.00	486	0	0.00	484	0	0.00	378
(EA1700) NEW EQUIPMENT TRAINING	0	0.00	160	0	0.00	179	0	0.00	178
TOTAL P-1 LINE ITEM			1239			663			819
									804

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

AMMUNITION PECULIAR EQUIPMENT

(EA0575)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions) \$	4.9	5.6	8.6	10.7	11.2	10.2	\$	9.8/9.6

DESCRIPTION:

Ammunition Peculiar Equipment (APE) is unique, low density equipment items specifically designed, fabricated, tested, procured, and adopted for use in ammunition depot operations on conventional and chemical ammunition. These depot operations involve maintenance, demilitarization, preservation/packaging, and surveillance functions on the ammunition item. The APE is not stocked nor is it available from commercial sources. The equipment is different from production line plant equipment in that it disassembles ammunition items into components, usually for the removal of a hazardous component. The APE is also designed to perform cleaning and preservation functions on ammunition subjected to deterioration effects (rust, corrosion, weathering, etc) during its storage life. The APE supporting surveillance is keyed to stockpile sampling and funding tests of the items to assure readiness for combat or training. Demilitarization APE is similar somewhat to maintenance APE but must go further in disassembly to destroy hazardous components and reclaim salvageable parts or metals. The APE is designed, developed, and fielded to support ammunition field service stocks that are currently on hand in the inventory control point and is used to restore these stocks to an issuance/serviceable condition.

JUSTIFICATION:

The APE and replacement parts must be on-hand to perform any of the ammunition depot operations for conventional and chemical ammunition. The ammunition depot operations cannot be accomplished if the required APE is not supplied in a timely manner. Ammunition readiness will be in jeopardy, public laws on environment and safety involving hazardous materiel may be violated, and a possible loss of life and Government property may result through altering of equipment to meet ammunition operations requirements. The APE is centrally managed by HQ,IOC. The equipment is loaded to worldwide locations for the accomplishment of depot type operations based on the ammunition requirements. The equipment described herein is required to support the following ammunition programs: Fiscal Year 1998 through Fiscal Year 2003 Integrated Conventional Ammunition Maintenance Plan (ICAMP), surveillance program for lethal chemical agents and munitions; equipment for worldwide maintenance lines; equipment to support the toxic chemical maintenance facilities; Prepositioned Ships; and also to support Government-owned, contractor-operated plants as Government furnished equipment (GFE) in support of ammunition depot operations at those locations.

BUDGET ITEM JUSTIFICATION SHEET

DATE

FEBRUARY 1997

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

PROCUREMENT AMMUNITION, ARMY/ACTIVITY 1. AMMUNITION

FIRST DESTINATION TRANSPORTATION (AMMO)

(EA0550)

	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
COST (In Millions)	\$ 4.3	\$ 5.4	\$ 6.6	\$ 6.3	\$ 5.5	\$ 5.4	\$ 5.6	\$ 5.7

DESCRIPTION:

Transportation funds are required to support procurement and distribution of Army ammunition end items from manufacturing plants or assembly points; e.g., AAP, to a CONUS depot, customer, other point of first acceptance into the Army supply system or to a port for transportation to a second destination; e.g., OCONUS customers. These funds directly support training and readiness requirements of soldiers in the field (CONUS and OCONUS) to include major OCONUS programs such as Europe and Korea training and prepositioned war reserve requirements; war reserves support to allies (Korea and Thailand); afloat prepositioned ships, etc.

BUDGET ACTIVITY 2

*****UNCLASSIFIED*****
 DEPARTMENT OF THE ARMY
 FY 98 PROCUREMENT PROGRAM
 98 PRES

EXHIBIT P-1
 DATE: 14-FEB-97

APPROPRIATION: **AMMUNITION** ACTIVITY: 2 **AMMUNITION PRODUCTION BASE SUPPORT**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS)	(THOUSANDS OF DOLLARS)									
			FY 98 UNIT COST	FY 96		FY 97		FY 98		FY 99			
				QTY K	COST	QTY K	COST	QTY K	COST	QTY K	COST		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
	PRODUCTION BASE SUPPORT												
48	PROVISION OF INDUSTRIAL FACILITIES (EP1000)				51631		39971		45857		49023		
49	COMPONENTS FOR PROVE-OUT (EA0054)				1415		1060		16750		12479		
50	LAYAWAY OF INDUSTRIAL FACILITIES (EP2000)				18141		17606		23000		19000		
51	MAINTENANCE OF INACTIVE FACILITIES (EP1500)				17503		31867		106118		93842		
52	CONVENTIONAL AMMO DEMILITARIZATION (EP1800)				97479		95513		5000				
53	ARMS INITIATIVE (EP2500)				44757		44958		196725		174344		
	SUB-ACTIVITY TOTAL				230926		230975		890902		975973		
	ACTIVITY TOTAL				230926		230975						
	APPROPRIATION TOTAL				1052896		1126090						

*****UNCLASSIFIED*****

BUDGET ITEM JUSTIFICATION SHEET										DATE																								
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE																																
PROCUREMENT OF AMMUNITION / Ammunition Production Base Support		INDUSTRIAL FACILITIES (EP1200)																																
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003																										
QUANTITY	0	0	0	0	0	0	0	0																										
COST (in millions)	51.6	40.0	45.9	49.0	58.6	66.0	71.8	78.0																										
<p>DESCRIPTION:</p> <p>The Industrial Facilities (IF) budget request contains funding for correction of environmental deficiencies at existing facilities, design of future projects to meet peacetime or future requirements, and replacement of obsolete or worn production equipment and correction of infrastructure.</p>																																		
<table border="0"> <tr> <td></td> <td>FY 96</td> <td>FY 97</td> <td>FY 98</td> <td>FY 99</td> </tr> <tr> <td>Environmental</td> <td>\$ 11.1</td> <td>\$ 12.2</td> <td>\$ 13.7</td> <td>\$ 23.8</td> </tr> <tr> <td>Design</td> <td>7.5</td> <td>6.4</td> <td>6.0</td> <td>6.0</td> </tr> <tr> <td>Production Support</td> <td>33.0</td> <td>21.4</td> <td>26.2</td> <td>19.2</td> </tr> <tr> <td>TOTAL</td> <td>\$ 51.6</td> <td>\$ 40.0</td> <td>\$ 45.9</td> <td>\$ 49.0</td> </tr> </table>											FY 96	FY 97	FY 98	FY 99	Environmental	\$ 11.1	\$ 12.2	\$ 13.7	\$ 23.8	Design	7.5	6.4	6.0	6.0	Production Support	33.0	21.4	26.2	19.2	TOTAL	\$ 51.6	\$ 40.0	\$ 45.9	\$ 49.0
	FY 96	FY 97	FY 98	FY 99																														
Environmental	\$ 11.1	\$ 12.2	\$ 13.7	\$ 23.8																														
Design	7.5	6.4	6.0	6.0																														
Production Support	33.0	21.4	26.2	19.2																														
TOTAL	\$ 51.6	\$ 40.0	\$ 45.9	\$ 49.0																														
<p>JUSTIFICATION:</p> <p>Funds are used for the establishment, augmentation, and improvement of production capability for items procured under the ammunition appropriations. Funds also correct environmental problems, which if left unfunded would result in costly fines and penalties against the Army.</p>																																		

BUDGET ITEM JUSTIFICATION SHEET					DATE
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE			February 1997
PROCUREMENT OF AMMUNITION /Ammunition Production Base Support		INDUSTRIAL FACILITIES (EP1200)			
LOCATION	PROJECT TITLE	PROJECT	FY 1996	FY 1997	FY 1998
PRODUCTION SUPPORT					
HOLSTON AAP	Production Support and Equipment Replacement	59X5328	3100	984	872
HOLSTON AAP	Consolidate Explosive Facility, Phase 1	5993327			389
					1000
IOWA AAP	Production Support and Equipment Replacement	59X5333	2102	787	861
IOWA AAP	Infrastructure-Replace Bridge H20/Rehabilitate Road C/ Correct Safety Deficiencies	5982776			4756
IOWA AAP	Renovate Building 100-101, Phase 2	5983333			1166
LAKE CITY AAP	Production Support and Equipment Replacement	59X5332	2839	1688	1216
LAKE CITY AAP	Infrastructure-Steam Distribution System (Schoolhouse Road and Areas 1-3/4/5/6)	59X2846	1025		7481
LAKE CITY AAP	Automated Data Management System	5962956	3963		
LAKE CITY AAP	Recondition Case Line No. 2, Phase 1	5962962	1268		
LAKE CITY AAP	Small Caliber Flexible Production Line	5972969		5852	
LAKE CITY AAP	Manhurin Loader Upgrade	5983330			2246
LAKE CITY AAP	Caliber .50 Upgrade	5983331			1722
LAKE CITY AAP	Stores, Tool/Gage and Machine Shop Consolidation	5993335			1223
LONE STAR AAP	Production Support and Equipment Replacement	59X5316	778	159	
LONE STAR AAP	105mm XM915/XM916 Dual Purpose Improved Conventional Munition (DPICM) Load, Assemble, and Pack (LAP)	5960145	1856		1136
LONE STAR AAP	Replace Area 1 Heating System	5962957	1321		
MILAN AAP	Production Support and Equipment Replacement	59X5317	1987	1941	773
MILAN AAP	Safety - Construct Fire Station	5962700	1235		1555

BUDGET ITEM JUSTIFICATION SHEET					DATE	February 1997
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE				
PROCUREMENT OF AMMUNITION /Ammunition Production Base Support		INDUSTRIAL FACILITIES (EP1200)				
LOCATION	PROJECT TITLE	PROJECT	FY 1996	FY 1997	FY 1998	FY 1999
MILAN AAP	Facilitization for 120mm High Explosive (HE) Mortar	5963320	4200			
PINE BLUFF ARSENAL	120mm Mortar Body Assembly Facility	5960177	1192			
RADFORD AAP	Production Support and Equipment Replacement	59X5326	2314	1905	1502	1851
RADFORD AAP	Safety - Overhead Electrical Service, Phase 1	59X2783			837	467
RADFORD AAP	Replace Three Acid Tanks	5962961	1800			
RADFORD AAP	Replace Wood Tanks - Building 419	5972965		1888		
RADFORD AAP	Infrastructure-Replace Raw Water Supply Line Buildings 408-409	5993322				1726
RADFORD AAP	Safety - Replace Natural Gas Lines	5993314				4331
SCRANTON AAP	Production Support and Equipment Replacement	59X5342	586	1318	1149	1806
SCRANTON AAP	Computer Integrated Manufacturing Support	5973329		1500		
HARRY DIAMOND LABORATORY	Production Support and Equipment Replacement	5961924	125			
PROVING GROUND	Production Support and Equipment Replacement	59X5060	1333	1425	1400	1200
VARIOUS AAP'S	Federal Energy Management Program	59X5201	0	1900	160	0
	TOTAL		33,024	21,347	26,141	19,222
ENVIRONMENTAL						
HOLSTON AAP	Correct Inflow/Infiltration in Sanitary Sewer	5962979	3401			
HOLSTON AAP	Production Support and Equipment Replacement	59X5328	724	782	1179	
HOLSTON AAP	Industrial Wastewater Treatment	59X2856	4059	4613		
HOLSTON AAP	Plant Wide Diking	59X2923			3457	2739
HOLSTON AAP	Replace Industrial Wastewater Line	5972938		3651		

BUDGET ITEM JUSTIFICATION SHEET					DATE	
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE			February 1997	
PROCUREMENT OF AMMUNITION /Ammunition Production Base Support		INDUSTRIAL FACILITIES (EP1200)				
LOCATION	PROJECT TITLE	PROJECT	FY 1996	FY 1997	FY 1998	FY 1999
HOLSTON AAP	Acid A Industrial Wastewater Equalization/Spill Ponds to Concrete Tanks	5992994				1845
IOWA AAP	Production Support and Equipment Replacement	59X5333	105	485	1626	534
LAKE CITY AAP	Production Support and Equipment Replacement	59X5332		579	861	
LAKE CITY AAP	Explosive Waste Incinerator Upgrade	5993337				1307
LONE STAR AAP	Production Support and Equipment Replacement	59X5316	161		1225	
LONE STAR AAP	Sanitary Sewer Collection System	5982955			1757	
MILAN AAP	Production Support and Equipment Replacement	59X5317	620	68	1277	
MILAN AAP	Upgrade Sewage Treatment Plant	5992943				4064
MILAN AAP	Rehabilitation of Sewage Collection Lines	5992944				5876
RADFORD AAP	Production Support and Equipment Replacement	59X5326		1294	1665	163
RADFORD AAP	Acid Sewer System Upgrade	5992925				5512
RADFORD AAP	Close Bioplant Equalization Basin	5962941	1444			
RADFORD AAP	Correct Defects in Equalization Tanks	5993313				1384
SCRANTON AAP	Production Support and Equipment Replacement	5985342			126	
VARIOUS AAP'S	Correct Environmental Deficiencies	59X2910	597	756	554	399
DESIGN	TOTAL		11,111	12,228	13,727	23,823
VARIOUS AAP'S	Engineering Design	59X3046	7496	6396	5989	5978
TOTAL INDUSTRIAL FACILITIES:			51,631	39,971	45,857	49,023

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE	
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL			4. PROJECT NUMBER			5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)			February 1997
Infrastructure-Replace Bridge H20, Rehabilitate Road C, Correct Safety Deficiencies		High Explosive (HE) Artillery/Demolition Charges (Trinitrotoluene (TNT)/H6)			5982776			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)			
		Not Applicable						Not Applicable			
ELEMENT OF COST		FY 98		H. FACILITY		Iowa Army Ammunition Plant					
		QTY	UNIT COST	1. NAME							
		(a)	(b)	2. LOCATION		Middletown, Iowa					
		TOTAL		3. TYPE (GOGO, GOCO, COCO)		GOCO					
		(c)									
A. CONSTRUCTION COST		4,375									
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST		0									
C. EQUIPMENT INSTALLATION COST		0									
D. CONTRACTOR SUPPORT COST		98									
E. CORPS OF ENGINEERS SUPPORT COST		262									
F. OTHER IN-HOUSE SUPPORT COST		21									
TOTAL FACILITY PROJECT COST		4,756									
G. OTHER COSTS		0									
1. FACILITY PROVE-OUT COST		0									
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION											
This project will correct the following deficiencies: Bridge H20 is a 55-year-old wooden trestle bridge located on the main road loop and washouts have caused the bridge to be closed twice in the past 5 years. Road C's structure is over 100 years old, the base has degenerated with time, and most culverts have failed. The existing 50-year-old 12-inch water service line to Line 3A has serious limitations as it is not looped to the main distribution system; therefore, an additional water line is needed for fire protection. Repeated expansion and contraction has caused concrete columns to split; rehabilitation is required to restore full dock function and avoid problems with various HE artillery production. The deteriorated Yard L concrete rail platforms require replacement for safety compliance.											

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Safety - Overhead Electrical Service, Phase 1		3. END ITEM SUPPORTED MODEL Propellants and Explosives (Nitroglycerin and Nitrocellulose)									
4. PROJECT NUMBER 5982783		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable							
ELEMENT OF COST		FY 98		H. FACILITY		Radford Army Ammunition Plant Radford, Virginia GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				770							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.				0							
2.											
3.											
SUBTOTAL EQUIPMENT COST				0							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				17							
E. CORPS OF ENGINEERS SUPPORT COST				46							
F. OTHER IN-HOUSE SUPPORT COST											
TOTAL FACILITY PROJECT COST				837							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>The purpose of this project is to bring the exterior electrical power and signal distribution systems into compliance with Army safety criteria in the following explosive facility areas: Nitroglycerin -2 (NG-2), Solvent Recovery Finishing Area, 4th Rolled Powder Area, and Rocket Manufacturing Areas.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Infrastructure-Steam Distribution System (Schoolhouse Road and Areas 1-3/4/5/6)		3. END ITEM SUPPORTED MODEL Ammunition Items: 5.56mm, 7.62mm, .50 Caliber, 20mm									
4. PROJECT NUMBER 5982846		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable							
ELEMENT OF COST		FY 98		H. FACILITY		Lake City Army Ammunition Plant Independence, Missouri GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				6,881							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.				0							
2.											
3.				0							
SUBTOTAL EQUIPMENT COST				0							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				153							
E. CORPS OF ENGINEERS SUPPORT COST				413							
F. OTHER IN-HOUSE SUPPORT COST				34							
TOTAL FACILITY PROJECT COST				7,481							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>This project provides for replacement of the steam and condensate lines to the steam plant along Owens Schoolhouse Road, and Areas 1-3, 1-4, 1-5, and 1-6. This will include all main and branch lines (building 85 and 35 areas, and 33/34 series buildings). It will further include replacing steam and condensate pipes, all pipe support structures, condensate pumps, traps, accessories and other components. This project will reduce the present loss of condensate return and its associated costs.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997				
2. PROJECT TITLE/TYPE Environmental at Ammunition Plants		3. END ITEM SUPPORTED MODEL Various												
4. PROJECT NUMBER 5982910		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable										
ELEMENT OF COST		FY 98		H. FACILITY		I. RELATED PROJECTS								
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)	Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
A. CONSTRUCTION COST				250										
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)														
1.														
2.														
3.														
SUBTOTAL EQUIPMENT COST				232										
C. EQUIPMENT INSTALLATION COST				56										
D. CONTRACTOR SUPPORT COST				16										
E. CORPS OF ENGINEERS SUPPORT COST				0										
F. OTHER IN-HOUSE SUPPORT COST				0										
TOTAL FACILITY PROJECT COST				554										
G. OTHER COSTS				0										
1. FACILITY PROVE-OUT COST				0										
2. MILITARY CONSTRUCTION APPN.				0										
J. PRINCIPAL MILESTONES 1. CONCEPT DESIGN COMPLETE 2. FINAL DESIGN COMPLETE 3. INITIAL/FINAL PROJECT AWARD 4. CONSTRUCTION COMPLETE 5. EQUIPMENT INSTALLATION COMPLETE 6. PROVE OUT BEGINS 7. PROVE OUT COMPLETE MONTH & YEAR Not Applicable Nov-96 Feb-98/Mar-98 May-99 Jul-99 Not Applicable Not Applicable														
NARRATIVE EXPLANATION Environmental laws and regulations demand that constant surveillance be maintained to ensure operations meet environmental standards. These efforts restore lands that have been contaminated by Department of Army activities, replace equipment, and expand processes to meet the requirements of various environmental laws and regulations. See following page for plant breakout.														

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)			1. DATE February 1997
2. PROJECT TITLE/TYPE Environmental at Ammunition Plants	3. END ITEM SUPPORTED MODEL		Various
4. PROJECT NUMBER 5982910	5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable	6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable	
<p align="center">AMMUNITION PRODUCTION BASE SUPPORT PROJECT 5982910</p> <p align="center">DATE February 1997</p>			
<u>INSTALLATION</u>	<u>PROJECT TITLE</u>	<u>CLASS *</u>	<u>DOLLARS (\$000)</u>
Iowa AAP	Carbon Reactivation Project	3	.291
Sunflower AAP	Water Treatment Plant Sludge Monofill	3	.263
	T O T A L		.554
<p>* Class 3: Includes projects and activities at facilities that do not have established deadlines by legally-mandated requirements, but are needed to address overall Army environmental goals. If not funded, these projects are likely to become compliance issues in the future.</p>			

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997					
2. PROJECT TITLE/TYPE Environmental - Plant Wide Diking		3. END ITEM SUPPORTED MODEL Research Department Explosive (RDX)/High Melt Explosive (HMX)													
4. PROJECT NUMBER 5982923		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable											
H. FACILITY		FY 98		1. NAME Holston Army Ammunition Plant											
ELEMENT OF COST		QTY (a)		UNIT COST (b)		TOTAL (c)		2. LOCATION Kingsport, Tennessee							
3. TYPE (GOCO, GOCO, COCO)		3,179				3,179		GOCO							
I. RELATED PROJECTS															
A. CONSTRUCTION COST								Project Number		Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)								5982923		Environmental - Plant Wide Diking	FY 99	2,739	No	Jan-99	Sep-00
1.						0									
2.						0									
3.						0									
SUBTOTAL EQUIPMENT COST						0									
C. EQUIPMENT INSTALLATION COST						0									
D. CONTRACTOR SUPPORT COST						70									
E. CORPS OF ENGINEERS SUPPORT COST						191									
F. OTHER IN-HOUSE SUPPORT COST						17									
TOTAL FACILITY PROJECT COST						3,457									
G. OTHER COSTS						0									
1. FACILITY PROVE-OUT COST						0									
2. MILITARY CONSTRUCTION APPN.						0									
J. PRINCIPAL MILESTONES															
1. CONCEPT DESIGN COMPLETE															
2. FINAL DESIGN COMPLETE															
3. INITIAL/FINAL PROJECT AWARD															
4. CONSTRUCTION COMPLETE															
5. EQUIPMENT INSTALLATION COMPLETE															
6. PROVE OUT BEGINS															
7. PROVE OUT COMPLETE															
MONTH & YEAR															
Jun-96															
Dec-96															
Jan-98/Jan-98															
Sep-99															
Not Applicable															
Not Applicable															
Not Applicable															
NARRATIVE EXPLANATION															
This project provides acid resistant diking for nitric acid tanks, spill protection at railroad and truck unloading/loading stations, and appropriate diking at other active chemical tanks located throughout the plant. This project is considered an environmental class 3H "Must Fund".															

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE Environmental - Sanitary Sewer Collection System		3. END ITEM SUPPORTED MODEL			Lone Star Army Ammunition Plant Texarkana, Texas					February 1997
4. PROJECT NUMBER 5982955		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)					and Volcano Items Including M98 Detonator, M53 Delay, M55 Detonator
ELEMENT OF COST		FY 98			H. FACILITY					
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME					
					2. LOCATION					
					3. TYPE (GOCO, GOCO, COCO)					
A. CONSTRUCTION COST				1,616						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										
1.										
2.										
3.										
SUBTOTAL EQUIPMENT COST				0						
C. EQUIPMENT INSTALLATION COST				0						
D. CONTRACTOR SUPPORT COST				36						
E. CORPS OF ENGINEERS SUPPORT COST				97						
F. OTHER IN-HOUSE SUPPORT COST										
TOTAL FACILITY PROJECT COST				1,757						
G. OTHER COSTS										
1. FACILITY PROVE-OUT COST				0						
2. MILITARY CONSTRUCTION APPN.				0						
NARRATIVE EXPLANATION		Sanitary sewer collection system is over 50-years-old. Infiltration of ground/rain water into the line has increased volume of waste water to the treatment plant. Exfiltration of sewage into ground/streams is causing contamination. This environmental project will replace existing sanitary sewer collection system to decrease amount of infiltration during wet weather and exfiltration during dry weather. Project also increases the flow capacity of the lines. This project is considered an environmental class 3.								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997			
2. PROJECT TITLE/TYPE Preparation of Equipment and Construction Design		3. END ITEM SUPPORTED MODEL Multiple											
4. PROJECT NUMBER 5983046		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable									
ELEMENT OF COST		FY 98		H. FACILITY									
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME 2. LOCATION 3. TYPE (GOGO, GOCO, COCO)		Multiple Multiple Multiple						
I. RELATED PROJECTS													
A. CONSTRUCTION COST						Project Number		Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)						Not Applicable							
1.													
2.													
3.													
SUBTOTAL EQUIPMENT COST													
C. EQUIPMENT INSTALLATION COST													
D. CONTRACTOR SUPPORT COST													
E. CORPS OF ENGINEERS SUPPORT COST													
F. OTHER IN-HOUSE SUPPORT COST													
TOTAL FACILITY PROJECT COST													
G. OTHER COSTS													
1. FACILITY PROVE-OUT COST													
2. MILITARY CONSTRUCTION APPN.													
NARRATIVE EXPLANATION		<p>1. CONCEPT DESIGN COMPLETE</p> <p>2. FINAL DESIGN COMPLETE</p> <p>3. INITIAL/FINAL PROJECT AWARD</p> <p>4. CONSTRUCTION COMPLETE</p> <p>5. EQUIPMENT INSTALLATION COMPLETE</p> <p>6. PROVE OUT BEGINS</p> <p>7. PROVE OUT COMPLETE</p> <p>MONTH & YEAR</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p>											
This project will provide the annual funding increment for the Industrial Facilities (IF) Program. These funds are used for the initiation and/or continuation of construction design criteria, equipment and construction concept and final design, process design specification, procurement packages, design reviews, design related analyses, preparation and incorporation of engineering change proposals, preparation of environmental evaluation to determine if a categorical exclusion to the requirement for an environmental assessment (EA) can be made, preparation of the EA or Environmental Impact Statement (EIS), and other design related efforts allowable under existing regulations deemed necessary to assure efficient and timely execution of facility projects.													

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Manhurin Loader Upgrade		3. END ITEM SUPPORTED MODEL									
4. PROJECT NUMBER 5983330		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		Ammunition Items: 7.62mm Cartridges (All Types)					
ELEMENT OF COST		FY 98		H. FACILITY		Lake City Army Ammunition Plant Independence, Missouri GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME 2. LOCATION 3. TYPE (GOCO, GOCO, COCO)						
A. CONSTRUCTION COST					0						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)					1,899						
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST					1,899						
C. EQUIPMENT INSTALLATION COST					316						
D. CONTRACTOR SUPPORT COST					19						
E. CORPS OF ENGINEERS SUPPORT COST					0						
F. OTHER IN-HOUSE SUPPORT COST					0						
TOTAL FACILITY PROJECT COST					2,246						
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST					0						
2. MILITARY CONSTRUCTION APPN.					0						
NARRATIVE EXPLANATION		<p>This project will purchase and install in Building 3 two Manhurin loaders which will modernize the powder loading process for 7.62mm cartridge cases and will modernize the process for attaching the cartridge case to the projectile. This effort will incorporate modern, on-line inspection technology to further improve production efficiency, reduce costs, and improve production safety.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE		Caliber .50 Upgrade								February 1997
3. END ITEM SUPPORTED MODEL										
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)		Ammunition Items: Caliber .50 (All Types)				
5983331		Not Applicable		Not Applicable						
ELEMENT OF COST		FY		H. FACILITY		Lake City Army Ammunition Plant				
		QTY	UNIT COST	1. NAME						
		(a)	(b)	2. LOCATION		Independence, Missouri				
				3. TYPE (GOCO, GOCO, COCO)		GOCO				
A. CONSTRUCTION COST				0						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)				1,266						
1.										
2.										
3.										
SUBTOTAL EQUIPMENT COST				1,266						
C. EQUIPMENT INSTALLATION COST				422						
D. CONTRACTOR SUPPORT COST				25						
E. CORPS OF ENGINEERS SUPPORT COST				0						
F. OTHER IN-HOUSE SUPPORT COST				9						
TOTAL FACILITY PROJECT COST				1,722						
G. OTHER COSTS				0						
1. FACILITY PROVE-OUT COST				0						
2. MILITARY CONSTRUCTION APPN.										
NARRATIVE EXPLANATION		<p>This project will convert three each 20mm high-speed priming machines and 20mm annealing capability to Caliber .50 in Building 3. In addition, this effort will procure Programmable Logic Controllers for Caliber .50 together with on-line case inspection equipment to increase production efficiency, reduce costs, and improve production safety.</p>								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Renovate Building 100-101, Phase 2		3. END ITEM SUPPORTED MODEL High Explosive (HE) Artillery/Demolition Charges (Tritrotoluene (TNT)/H6)									
4. PROJECT NUMBER 5983333		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable	
ELEMENT OF COST		FY 98		H. FACILITY		Iowa Army Ammunition Plant Middletown, Iowa GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				1,077							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.				0							
2.											
3.											
SUBTOTAL EQUIPMENT COST				0							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				24							
E. CORPS OF ENGINEERS SUPPORT COST				65							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				1,166							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>This project will replace cast iron steam radiators, window air conditioning units with a Heating Ventilation and Air Conditioning (HVAC) system, update electrical system for computer and word processor use, provide adequate computer and telephone circuits, and replace/add new wall insulation. This is the second of a four-phase upgrade to a 56-year-old building.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Manufacturing Management System		3. END ITEM SUPPORTED MODEL Load, Assemble and Pack (LAP) of various Ammunition and Mortar Rounds; to include: 40mm Demo Kit, 60/81/120mm Mortar			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable						
5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		5. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable						
H. FACILITY		H. FACILITY			H. FACILITY						
ELEMNT OF COST		ELEMNT OF COST			ELEMNT OF COST						
QTY (e)		UNIT COST (b)			TOTAL (c)			O 3. TYPE (GOGO, COCO, COCO)			
FY 98		FY 98			FY 98			FY 98			
5983338								Milan Army Ammunition Plant Milan, Tennessee GOCO			
A. CONSTRUCTION COST					264						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST					264						
C. EQUIPMENT INSTALLATION COST											
D. CONTRACTOR SUPPORT COST					1,409						
E. CORPS OF ENGINEERS SUPPORT COST					84						
F. OTHER IN-HOUSE SUPPORT COST					0						
TOTAL FACILITY PROJECT COST					1,757						
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST					0						
2. MILITARY CONSTRUCTION APPN.					0						
NARRATIVE EXPLANATION		<p>This project will upgrade the computer hardware and software at the plant in order to improve administrative functions and reduce costs in the following typical categories: production control and planning, time and attendance, and the facilities engineering job estimating system. This effort will reduce costs, improve production efficiency, and improve compliance with Occupational Safety and Health Act (OSHA) requirements.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Instrumentation to Support Ammunition Production Testing		3. END ITEM SUPPORTED MODEL Initial Production, production acceptance and product improvements									
4. PROJECT NUMBER 985060		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) n/a								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) n/c	
ELEMENT OF COST		FY		H. FACILITY		Yuma Proving Ground & Aberdeen Test Center Yuma, AZ and Aberdeen Proving Center, MD GOGO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				1400							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				1400							
C. EQUIPMENT INSTALLATION COST											
D. CONTRACTOR SUPPORT COST											
E. CORPS OF ENGINEERS SUPPORT COST											
F. OTHER IN-HOUSE SUPPORT COST											
TOTAL FACILITY PROJECT COST				1400							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST											
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION		<p>Yuma Proving Ground and Aberdeen Test Center perform and report results of production acceptance tests for ammunition end items. Ammunition acceptance testing require support from diverse facilities, equipment and instrumentation. The funds at Yuma will be used to for climatic and dynamic simulation; x-ray, dimensional and chemical analysis; metal and wood fabrication support, optical, photographic, video and tracking equipment and realtime and post test data processing analysis. At Aberdeen funds will support platform refrigeration package to augment current large chamber climatic testing and replace aged industrial plant equipment.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL			Not Applicable					February 1997
Federal Energy Management Program										
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)					
5985201		Not Applicable			Not Applicable					
ELEMENT OF COST		FY 98			H. FACILITY					
		QTY	UNIT COST	TOTAL	1. NAME					
		(a)	(b)	(c)	2. LOCATION					
					3. TYPE (GOCO, GOCO, COCO)					
A. CONSTRUCTION COST				0						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										
1.				123						
2.										
3.										
SUBTOTAL EQUIPMENT COST				123						
C. EQUIPMENT INSTALLATION COST				31						
D. CONTRACTOR SUPPORT COST				6						
E. CORPS OF ENGINEERS SUPPORT COST				0						
F. OTHER IN-HOUSE SUPPORT COST				0						
TOTAL FACILITY PROJECT COST				160						
G. OTHER COSTS										
1. FACILITY PROVE-OUT COST				0						
2. MILITARY CONSTRUCTION APPN.				0						
NARRATIVE EXPLANATION		<p>Energy saving project will provide steam efficiency at Radford Army Ammunition Plant by the installation of automatic blowdown controls for all five boilers.</p>								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL			4. PROJECT NUMBER					February 1997
Production Support and Equipment Replacement		Fuzes and Volcano Items, Including M88 Delonator, M53 Delay, M55 Delonator			5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)					6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)
5985316		Not Applicable			Not Applicable					Not Applicable
ELEMENT OF COST		FY 98			H. FACILITY					
		QTY	UNIT COST	TOTAL	1. NAME					
		(a)	(b)	(c)	2. LOCATION					
					3. TYPE (GOGO, GOCO, COCO)					
A. CONSTRUCTION COST				1,059						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										
1.										
2.										
3.										
SUBTOTAL EQUIPMENT COST				112						
C. EQUIPMENT INSTALLATION COST										
D. CONTRACTOR SUPPORT COST				1						
E. CORPS OF ENGINEERS SUPPORT COST				53						
F. OTHER IN-HOUSE SUPPORT COST				0						
TOTAL FACILITY PROJECT COST				1,225						
G. OTHER COSTS										
1. FACILITY PROVE-OUT COST				0						
2. MILITARY CONSTRUCTION APPN.				0						
NARRATIVE EXPLANATION		<p>This project provides for the procurement of a gas chromatograph which will improve product quality and provide the capability to identify unknown substances. This project will also replace the sewer line in the P/Q Area; the current line has deteriorated to a point in which the flow consists mainly of groundwater which has infiltrated the line. In addition, this project provides for the construction of burning pads to prevent/eliminate soil contamination in the High Explosive Burning Ground (HEBG) Area.</p>								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL Load, Assembly, and Pack (LAP) of Various Ammunition and Mortar Rounds to include: 40mm Demo Kit, 60/81/120mm Mortar									
4. PROJECT NUMBER 5985317		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable							
ELEMENT OF COST		FY 98		H. FACILITY							
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)				
A. CONSTRUCTION COST				696							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.				1,250							
2.											
3.											
SUBTOTAL EQUIPMENT COST				1,250							
C. EQUIPMENT INSTALLATION COST				15							
D. CONTRACTOR SUPPORT COST				89							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				2,050							
G. OTHER COSTS				0							
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION		<p>Project involves the purchase of the following replacement items: crimping machine for M74 Grenades, pad printer for 40mm metal containers, and pad printer for mortar metal containers. An automated spike setter/driver to replace a manual machine result in a benefit to investment ratio of 4.35. Project balance consists of three environmental efforts to remove and replace roofs and wall materials containing asbestos. The age of the roofing and wall materials make them susceptible to deterioration thus causing the asbestos to become airborne, causing a health hazard.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL								February 1997
4. PROJECT NUMBER 5985326		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)		Propellants and Explosives (Nitroglycerin and Nitrocellulose)				
ELEMMENT OF COST		FY 98		7. FACILITY		8. ANNUAL CAPACITY AFTER PROJECT (1-8-5)				
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME		2. LOCATION			
					456		3. TYPE (GOCO, GOCO, COCO)			
A. CONSTRUCTION COST					1,901		Radford Army Ammunition Plant Radford, Virginia GOCO			
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										
1.										
2.										
3.										
SUBTOTAL EQUIPMENT COST					1,901					
C. EQUIPMENT INSTALLATION COST					752					
D. CONTRACTOR SUPPORT COST					58					
E. CORPS OF ENGINEERS SUPPORT COST					0					
F. OTHER IN-HOUSE SUPPORT COST					0					
TOTAL FACILITY PROJECT COST					3,167					
G. OTHER COSTS										
1. FACILITY PROVE-OUT COST										
2. MILITARY CONSTRUCTION APPN.										
NARRATIVE EXPLANATION		<p>This project involves the following efforts: Upgrade Halon 1301 Fire Suppression Systems, implement surface water management at the Waste Decontamination Burning Ground and Air Curtain Destructor Area, update the fire alarm system, and upgrade instrumentation for the analytical laboratory. It will replace 5 oil circuit reclosers at the Cast and Bioplant Primary Distribution Substations, procure and install a remote and automated slurry mix wringer in Building 9304, replace a chiller at the Research, Development and Acquisition Information System Agency (RDAISA), and replace strong alcohol tanks at Tank Farm 2546. Further, this effort will provide gauging on solvent area tanks 3546, 2546, and 6203.</p>								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE	
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL			Research Department Explosive (RDX)/High Melt Explosive (HMX)						
Production support and Equipment Replacement					6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)						
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)			Not Applicable						
5985328		Not Applicable									
ELEMENT OF COST		FY 98			H. FACILITY						
		QTY	UNIT COST	TOTAL	1. NAME						
		(a)	(b)	(c)	2. LOCATION						
					3. TYPE (GOCO, GOCO, COCO)						
					GOCO						
I. RELATED PROJECTS											
A. CONSTRUCTION COST				564	Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				1,147							
C. EQUIPMENT INSTALLATION COST				276							
D. CONTRACTOR SUPPORT COST				30							
E. CORPS OF ENGINEERS SUPPORT COST				34							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				2,051	J. PRINCIPAL MILESTONES						
G. OTHER COSTS					1. CONCEPT DESIGN COMPLETE						
1. FACILITY PROVE-OUT COST				0	2. FINAL DESIGN COMPLETE						
2. MILITARY CONSTRUCTION APPN.				0	3. INITIAL/FINAL PROJECT AWARD						
					4. CONSTRUCTION COMPLETE						
					5. EQUIPMENT INSTALLATION COMPLETE						
					6. PROVE OUT BEGINS						
					7. PROVE OUT COMPLETE						
					MONTH & YEAR						
					May-96						
					Nov-96						
					Jan-98/May-98						
					Jul-00						
					Sep-00						
					Not Applicable						
					Not Applicable						
NARRATIVE EXPLANATION											
Project removes 11 Polychlorinated Biphenyl filled transformers/rectifiers (T/R's) and provides for installation of new T/Rs; provides for replace of one nitric acid product tank, replaces steam engine with electric motors, installs heat exchangers on Maggie Units 5 and 6, provides hazard vapor release notification and laser particle size analyzer for explosive particle measurement, and provides accidental release alarms in Area A. Three of the 7 items have environmental benefits - one is a Class 3 "Must Fund".											

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997		
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL										
4. PROJECT NUMBER 5985332		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		
ELEMENT OF COST		FY 98		TOTAL		H. FACILITY						
		QTY (a)	UNIT COST (b)	(c)		1. NAME		Lake City Army Ammunition Plant				
						2. LOCATION		Independence, Missouri				
				304		3. TYPE (GOCO, GOCO, COCO)		GOCO				
I. RELATED PROJECTS												
A. CONSTRUCTION COST				1,149		Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)				1,149		Not Applicable						
1.												
2.												
3.												
SUBTOTAL EQUIPMENT COST				571								
C. EQUIPMENT INSTALLATION COST				53								
D. CONTRACTOR SUPPORT COST				0								
E. CORPS OF ENGINEERS SUPPORT COST				0								
F. OTHER IN-HOUSE SUPPORT COST				0								
TOTAL FACILITY PROJECT COST				2,077		J. PRINCIPAL MILESTONES						
G. OTHER COSTS						1. CONCEPT DESIGN COMPLETE						
1. FACILITY PROVE-OUT COST						2. FINAL DESIGN COMPLETE						
2. MILITARY CONSTRUCTION APPN.						3. INITIAL/FINAL PROJECT AWARD						
						4. CONSTRUCTION COMPLETE						
						5. EQUIPMENT INSTALLATION COMPLETE						
						6. PROVE OUT BEGINS						
						7. PROVE OUT COMPLETE						
						MONTH & YEAR						
						Not Applicable						
						Sep-96						
						Jan-98/Jan-99						
						Oct-99						
						Jan-00						
						Not Applicable						
						Not Applicable						
NARRATIVE EXPLANATION												
This project includes rebuild of primer handling systems of the primer insert submodules of Lines 2, 3, and 5; provides and installs a replacement industrial waste line inside and leading from building 1; purchases and installs cartridge feeders with conveyors and buggy dumps for final inspection and packing of .50 caliber cartridges; constructs a dewatering unit for use of the industrial wastewater treatment plant, building 93. Project also upgrades and retrofits building 2, 20-round carton pack machine with automated carton and separator feeder and procures and installs an 8-station Computer Numerically Controlled (CNC), horizontal single turret lathe with 1-1/16 inch bar capacity, programmable slides at spindle nose, and 480 volt, 3 phase motor.												

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL Family of Scatterable Mines (FASCAM), Mines, Demolition (DEMO) Block									
4. PROJECT NUMBER 5985333		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable	
ELEMENT OF COST		FY 98		H. FACILITY		Iowa Army Ammunition Plant Middletown, Iowa GOCO					
		QTY (e)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				360							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				1,664							
C. EQUIPMENT INSTALLATION COST				412							
D. CONTRACTOR SUPPORT COST				51							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				2,487							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST											
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION		<p>This project will purchase and install a super critical fluid extractor for environmental sampling, a mass spectrometer for explosive evaluation, an ultraviolet deluge system, a scrubber for oxides of sulfur emission, and a universal measuring machine. Project will also replace the following items: optical comparator, obsolete computer aided drafting hardware, and chiller containing ozone depleting chemicals. Six of the ten items have environmental benefits - one is an environmental Class 1 "Must Fund".</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997				
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL												
4. PROJECT NUMBER 5985342		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		7. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		8. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable						
ELEMENT OF COST		FY 98		H. FACILITY		I. RELATED PROJECTS		J. MONTH & YEAR						
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)	Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
A. CONSTRUCTION COST														
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)														
1.														
2.														
3.														
SUBTOTAL EQUIPMENT COST														
C. EQUIPMENT INSTALLATION COST														
D. CONTRACTOR SUPPORT COST														
E. CORPS OF ENGINEERS SUPPORT COST														
F. OTHER IN-HOUSE SUPPORT COST														
TOTAL FACILITY PROJECT COST														
G. OTHER COSTS														
1. FACILITY PROVE-OUT COST														
2. MILITARY CONSTRUCTION APPN.														
NARRATIVE EXPLANATION This project will rehabilitate the Forge Shop cooling tower which has gradually deteriorated to a condition of increasing nonreliability and disfunction. It will provide fire protection to areas of combustible material storage by installing a sprinkler system. This effort will construct custom built enclosure rooms to allow for improved press operator noise protection and to meet Army safety criteria. It will provide guarding for Robot-Manipulators to meet occupational Safety and Health Administration (OSHA) regulations. This effort will also provide for spill containment within the confines of the point Storage Area to avoid spill flow to the manufacturing areas and avoid drainage into the wastewater collection system.														

INDUSTRIAL FACILITIES

FY 1999

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Safety - Overhead Electrical Service, Phase II		3. END ITEM SUPPORTED MODEL								Propellants and Explosives (Nitroglycerin and Nitrocellulose)	
4. PROJECT NUMBER 5992783		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		Radford Army Ammunition Plant Radford, Virginia GOCO					
ELEMENT OF COST		FY 99		H. FACILITY							
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME						
					2. LOCATION						
				429	3. TYPE (GOCO, GOCO, COCO)						
I. RELATED PROJECTS											
A. CONSTRUCTION COST				0	Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)				0	5992783	Safety - Overhead Electrical Service, Phase 1	FY 98	.837	No	Mar-98	Nov-99
1.				0							
2.				0							
3.				10							
SUBTOTAL EQUIPMENT COST				26							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				0							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				467							
G. OTHER COSTS				0							
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION					MONTH & YEAR						
The purpose of this project is to bring the exterior electrical power and signal distribution systems into compliance with Army safety criteria in the following explosive facility areas: Nitroglycerine-1 (NG-1), Premix Number 1, 1st Rolled Powder Area, and Green Lines.					1. CONCEPT DESIGN COMPLETE						
					2. FINAL DESIGN COMPLETE						
					3. INITIAL/FINAL PROJECT AWARD						
					4. CONSTRUCTION COMPLETE						
					5. EQUIPMENT INSTALLATION COMPLETE						
					6. PROVE OUT BEGINS						
					7. PROVE OUT COMPLETE						
					Aug-96						
					Nov-97						
					Mar-99/Mar-99						
					Nov-00						
					Not Applicable						
					Not Applicable						
					Not Applicable						

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										I. DATE February 1997	
2. PROJECT TITLE/TYPE Environmental at Ammunition Plants		3. END ITEM SUPPORTED MODEL									
4. PROJECT NUMBER 5992910		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		Various					
ELEMENT OF COST		FY 99		H. FACILITY		U.S. Army Industrial Operations Command (IOC) Various Ammunition Plants GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME 2. LOCATION 3. TYPE (GOCO, GOCO, COCO)						
A. CONSTRUCTION COST					0						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)					316						
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				316							
C. EQUIPMENT INSTALLATION COST				79							
D. CONTRACTOR SUPPORT COST				4							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				399							
G. OTHER COSTS				0							
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>Environmental laws and regulations demand that constant surveillance be maintained to ensure operations meet environmental standards. These efforts restore lands that have been contaminated by Department of Army activities, replace equipment, and expand processes to meet the requirements of various environmental laws and regulations. Plant breakout on following page.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)				1. DATE
2. PROJECT TITLE/TYPE	3. END ITEM SUPPORTED MODEL			
Environmental at Ammunition Plants				
4. PROJECT NUMBER	5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable	6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable	Various	
5992910			PROJECT 5992910	
AMMUNITION PRODUCTION BASE SUPPORT				
DATE: February 1997				
INSTALLATION	PROJECT TITLE	CLASS	DOLLARS (\$000)	
Radford AAP	Dedicated Groundwater Well Pumps	3	.201	
Radford AAP	Utilities Data Acquisition Outfalls	3	.198	
TOTAL			.399	

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL								February 1997
Environmental - Plant Wide Diking		Research Department Explosive (RDX)/High Melt Explosive (HMX)								
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)				
5992923		Not Applicable		Not Applicable		Not Applicable				
ELEMENT OF COST		FY 99		H. FACILITY		Holston Army Ammunition Plant				
		QTY	UNIT COST	TOTAL	1. NAME					
		(a)	(b)	(c)	2. LOCATION	Kingsport, Tennessee				
A. CONSTRUCTION COST				2,520	3. TYPE (GOCO, GOCO, COCO)	GOCO				
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)				0	I. RELATED PROJECTS					
1.					Project Number	Title	FY & Appn	Value (\$ mil)	Start Date	Compl Date
2.					5982923	Environmental - Plant Wide Diking	FY 98	3,457	Jan-98	Sep-99
3.										
SUBTOTAL EQUIPMENT COST				0	J. PRINCIPAL MILESTONES					
C. EQUIPMENT INSTALLATION COST				0	1. CONCEPT DESIGN COMPLETE					
D. CONTRACTOR SUPPORT COST				0	2. FINAL DESIGN COMPLETE					
E. CORPS OF ENGINEERS SUPPORT COST				55	3. INITIAL/FINAL PROJECT AWARD					
F. OTHER IN-HOUSE SUPPORT COST				151	4. CONSTRUCTION COMPLETE					
TOTAL FACILITY PROJECT COST				2,739	5. EQUIPMENT INSTALLATION COMPLETE					
G. OTHER COSTS				0	6. PROVE OUT BEGINS					
1. FACILITY PROVE-OUT COST				0	7. PROVE OUT COMPLETE					
2. MILITARY CONSTRUCTION APPN.					MONTH & YEAR					
					Sep-96					
					Feb-97					
					Jan-99/Jan-99					
					Sep-00					
					Not Applicable					
					Not Applicable					
					Not Applicable					
NARRATIVE EXPLANATION		This project completes efforts required to provide acid resistant diking for nitric acid tanks, spill protection at railroad and truck unloading/loading stations, and appropriate diking at other active chemical tanks located throughout the plant. This project is considered an environmental class 3 "Must Fund".								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Environmental - Acid Sewer System Upgrade		3. END ITEM SUPPORTED MODEL									
4. PROJECT NUMBER 5992925		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		7. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		8. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable			
ELEMENT OF COST		FY 99		H. FACILITY		I. RELATED PROJECTS		J. PRINCIPAL MILESTONES		MONTH & YEAR	
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
A. CONSTRUCTION COST				5,070	2. LOCATION						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)					3. TYPE (GOCO, GOCO, COCO)						
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				0							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				113							
E. CORPS OF ENGINEERS SUPPORT COST				304							
F. OTHER IN-HOUSE SUPPORT COST				25							
TOTAL FACILITY PROJECT COST				5,512							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION											
This project provides for remediation of the acid sewer system. The primary means of rehabilitation will be line replacement or line reconstruction without excavation using cured in-place plastic resin. Remediation will also include the disposal of contaminated soil or other wastes. This project is considered an Environmental Class 2 "Must Fund".											

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Environmental - Upgrade Sewage Treatment Plant		3. END ITEM SUPPORTED MODEL Load, Assemble and Pack of Various Munitions; Mortars, 40mm, Demo Kits									
4. PROJECT NUMBER 5992943		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable	
ELEMENT OF COST		FY 99		H. FACILITY		Milan Army Ammunition Plant Milan, Tennessee GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				3,738							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				0							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				83							
E. CORPS OF ENGINEERS SUPPORT COST				224							
F. OTHER IN-HOUSE SUPPORT COST											
TOTAL FACILITY PROJECT COST				4,064							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST											
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION		<p>This project provides for the construction of an oxidation ditch sewage treatment plant to replace the existing 50-year-old trickling filter plant. Due to age and obsolete technology used, the current system is not capable of meeting the effluent requirements of the Environmental Protection Agency (EPA). The plant has received notices of violation for their inability to meet the EPA requirements. This project is considered an Environmental Class 2 "Must Fund".</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE	
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL			1. DATE						
Environmental - Rehabilitation of Sewage Collection Lines					February 1997						
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)						
5992944		Not Applicable			Not Applicable						
ELEMENT OF COST		FY 99			H. FACILITY						
		QTY	UNIT COST	TOTAL	1. NAME						
		(a)	(b)	(c)	2. LOCATION						
				5,404	3. TYPE (GOGO, GOCO, COCO)						
					Milan Army Ammunition Plant						
					Milan, Tennessee						
					GOCO						
I. RELATED PROJECTS											
A. CONSTRUCTION COST				0	Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)					5992943	Environmental - Upgrade Sewage Treatment Plant	FY 99	4.064	No	Jan-99	Jul-00
C. SUBTOTAL EQUIPMENT COST				0							
D. EQUIPMENT INSTALLATION COST				0							
E. CONTRACTOR SUPPORT COST				121							
F. CORPS OF ENGINEERS SUPPORT COST				324							
G. OTHER IN-HOUSE SUPPORT COST				27							
TOTAL FACILITY PROJECT COST				5,876							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>This project will rehabilitate existing sewage collection system by replacing manholes and sewer collection lines, thus reducing inflow and infiltration. The existing system has frequent breaks causing heavy maintenance. During heavy rains the plant has experienced infiltration in excess of five times the normal flow. This sudden surge inflow causes the treatment facility to be over stressed resulting in violations to the facility's discharge permit. This effort is considered an Environmental Class 2, "Must Fund".</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997		
2. PROJECT TITLE/TYPE Environmental-Acid A Industrial Waste Water Equalization/Spill Ponds to Concrete Tanks			3. END ITEM SUPPORTED MODEL			Research Department Explosive (RDX)/High Melt Explosive (HMX)						
4. PROJECT NUMBER 5992994			5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable						
ELEMENT OF COST			FY 99			H. FACILITY						
			QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME 2. LOCATION 3. TYPE (GOCO, GOCO, COCO)						
A. CONSTRUCTION COST					1,697	Holston Army Ammunition Plant Kingsport, Tennessee GOCO						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)						I. RELATED PROJECTS						
1.					0	Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
2.					0		Not Applicable					
3.					0							
SUBTOTAL EQUIPMENT COST					0							
C. EQUIPMENT INSTALLATION COST					0							
D. CONTRACTOR SUPPORT COST					38							
E. CORPS OF ENGINEERS SUPPORT COST					102							
F. OTHER IN-HOUSE SUPPORT COST					8							
TOTAL FACILITY PROJECT COST					1,845	J. PRINCIPAL MILESTONES						
G. OTHER COSTS					0	1. CONCEPT DESIGN COMPLETE 2. FINAL DESIGN COMPLETE 3. INITIAL/FINAL PROJECT AWARD 4. CONSTRUCTION COMPLETE 5. EQUIPMENT INSTALLATION COMPLETE 6. PROVE OUT BEGINS 7. PROVE OUT COMPLETE						
1. FACILITY PROVE-OUT COST					0	Aug-95 Nov-97 Jan-99/Jan-99 Jul-00 Not applicable Not applicable Not applicable						
2. MILITARY CONSTRUCTION APPN.					0	Not applicable Not applicable Not applicable						
NARRATIVE EXPLANATION												
This project will replace two clay lined ponds with concrete tanks. Clay lining is not adequate to prevent groundwater contamination by the industrial wastewater in the ponds. If the ponds contaminate groundwater, the groundwater could contaminate the sough fork of the Holston river which flows about 50 feet from the ponds. This project is considered an Environmental Class 3, "Must Fund".												

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE										February 1997
3. END ITEM SUPPORTED MODEL										
4. PROJECT NUMBER										
5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)										
6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)										
7. ELEMENT OF COST										
8. QTY										
9. UNIT COST										
10. TOTAL										
11. TYPE (GOGO, GOCO, COCO)										
A. CONSTRUCTION COST										Multiple
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										Multiple
1.										Multiple
2.										Multiple
3.										Multiple
SUBTOTAL EQUIPMENT COST										
C. EQUIPMENT INSTALLATION COST										
D. CONTRACTOR SUPPORT COST										
E. CORPS OF ENGINEERS SUPPORT COST										
F. OTHER IN-HOUSE SUPPORT COST										
TOTAL FACILITY PROJECT COST										
G. OTHER COSTS										
1. FACILITY PROVE-OUT COST										
2. MILITARY CONSTRUCTION APPN.										
NARRATIVE EXPLANATION										
This project will provide the annual funding increment for the Industrial Facilities (IF) Program. These funds are used for the initiation and/or continuation of construction design criteria, equipment and construction concept and final design, process design specifications, procurement packages, design reviews, design related analyses, preparation and incorporation of engineering change proposals, preparation of environmental evaluation to determine if a categorical exclusion to the requirement for an environmental assessment (EA) can be made, preparation of the EA or Environmental Impact Statement (EIS), and other design related efforts allowable under existing regulations deemed necessary to assure efficient and timely execution of facility projects.										

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Environmental - Correct Defects in Equalization Tanks		3. END ITEM SUPPORTED MODEL Propellants and Explosives (Nitroglycerin and Nitrocellulose)									
4. PROJECT NUMBER 5993313		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable				6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable					
ELEMENT OF COST		FY 99		H. FACILITY		Radford Army Ammunition Plant Radford, Virginia GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				1,273							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				0							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				28							
E. CORPS OF ENGINEERS SUPPORT COST				76							
F. OTHER IN-HOUSE SUPPORT COST				7							
TOTAL FACILITY PROJECT COST				1,384							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST											
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION		<p>This project provides for replacement of the leaking high density polyethylene liner system with a stainless steel liner at the Waste Acid Equalization Basin. Because of leaks in the current liner, the facility cannot be used. Migration of acidic wastewater which contains Nitrocellulose (NC) fines/particles has resulted in the deterioration of concrete tanks and the deposition of NC fines/particles in confined spaces which are inaccessible for cleaning. This project is considered an Environmental Class 1 "Must Fund".</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997			
2. PROJECT TITLE/TYPE Safety - Replace Natural Gas Line		3. END ITEM SUPPORTED MODEL											
4. PROJECT NUMBER 5993314		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		7. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		8. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable					
ELEMENT OF COST		FY 99		H. FACILITY		I. RELATED PROJECTS		J. PRINCIPAL MILESTONES		MONTH & YEAR			
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOGO, GOCO, COCO)	Project Number	Title	FY & Appn	Value (\$ mil)	Start Date	Compl Date
A. CONSTRUCTION COST				3,984									
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)													
1.													
2.													
3.													
SUBTOTAL EQUIPMENT COST				0									
C. EQUIPMENT INSTALLATION COST				0									
D. CONTRACTOR SUPPORT COST				89									
E. CORPS OF ENGINEERS SUPPORT COST				239									
F. OTHER IN-HOUSE SUPPORT COST				19									
TOTAL FACILITY PROJECT COST				4,331									
G. OTHER COSTS													
1. FACILITY PROVE-OUT COST													
2. MILITARY CONSTRUCTION APPN.													
NARRATIVE EXPLANATION													
This project will assure reliable natural gas service to the plant production and waste propellant incineration operations and correct safety deficiencies. This project provides for replacement of an estimated 21,000 linear feet of natural gas line piping. It further provides for the replacement of retrofit cathodic protection on an additional 14,500 linear feet of natural gas line piping.													

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Infrastructure - Replace Raw Water Supply Line, Building 408 to Building 409		3. END ITEM SUPPORTED MODEL			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Propellants and Explosives (Nitroglycerin and Nitrocellulose)						
4. PROJECT NUMBER 5993322		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable						
ELEMENT OF COST		FY 99		H. FACILITY		Radford Army Ammunition Plant Radford, Virginia GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)				
A. CONSTRUCTION COST				1,587							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				0							
C. EQUIPMENT INSTALLATION COST				0							
D. CONTRACTOR SUPPORT COST				0							
E. CORPS OF ENGINEERS SUPPORT COST				36							
F. OTHER IN-HOUSE SUPPORT COST				95							
TOTAL FACILITY PROJECT COST				1,726							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>The purpose of this project is to provide an uninterrupted water supply for plant operations. A failure in the existing line would stop all production in the main plant area. This effort will replace approximately 4,200 feet of 36-inch raw water line from the River Pump House (Building 408) to the Filter Plant (Building 409). This project will also include the installation of new piping to connect the 36-inch line to the existing 30-inch line</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL								February 1997
Consolidate Explosive Facility		Research Department Explosive (RDX)/High Melt Explosive (HMX)								
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)		Not Applicable				
5993327		Not Applicable		Not Applicable						
ELEMENT OF COST		FY 99		H. FACILITY		I. RELATED PROJECTS				
		QTY	UNIT COST	TOTAL	1. NAME	2. LOCATION	3. TYPE (GOGO, GOCO, COCO)			
		(a)	(b)	(c)						
A. CONSTRUCTION COST				0						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										
1.										
2.										
3.										
SUBTOTAL EQUIPMENT COST				407						
C. EQUIPMENT INSTALLATION COST										
D. CONTRACTOR SUPPORT COST				523						
E. CORPS OF ENGINEERS SUPPORT COST				46						
F. OTHER IN-HOUSE SUPPORT COST				0						
TOTAL FACILITY PROJECT COST				24						
G. OTHER COSTS										
1. FACILITY PROVE-OUT COST				1,000						
2. MILITARY CONSTRUCTION APPN.				0						
NARRATIVE EXPLANATION		<p>This project is Phase 1 of 2 that will consolidate the explosive operations to Lines 5 and 6. Phase 1 upgrades the Process Logic Controller (PLC) in Building D-5, adds kettle dry to Building L-5, and relocates the Sweco Filter to Building G-6.</p>								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Stores, Tool/Gage, and Machine Shop Consolidation		3. END ITEM SUPPORTED MODEL									
4. PROJECT NUMBER 5993335		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable	
ELEMENT OF COST		FY 99		H. FACILITY		Lake City Army Ammunition Plant Independence, Missouri GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				945							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				945							
C. EQUIPMENT INSTALLATION COST											
D. CONTRACTOR SUPPORT COST				204							
E. CORPS OF ENGINEERS SUPPORT COST				69							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				1,223							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>This project will provide adequate facilities for the transfer of stores from Building 3 into Building 12B, and relocate the tools/gages and machine shop equipment from Building 10 to Building 3. This project involves necessary renovations to Building 12B in order to accommodate the new stores mission. This renovation also consists of upgrading the electrical, mechanical, and air-conditioning system in Building 12B.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE				
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL		Load, Assembly, and Pack (LAP) of Primers, Detonators, Delays, Fuzes, and Volcano Items Including M98 Delonator, M53 Delay, and M55 Delonator						February 1997				
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)										
59933336		Not Applicable		Not Applicable										
ELEMENT OF COST		FY 99		H. FACILITY		I. RELATED PROJECTS								
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)	Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
A. CONSTRUCTION COST														
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)														
1.				1,133										
2.														
3.														
SUBTOTAL EQUIPMENT COST				1,133										
C. EQUIPMENT INSTALLATION COST														
D. CONTRACTOR SUPPORT COST				1,031										
E. CORPS OF ENGINEERS SUPPORT COST				108										
F. OTHER IN-HOUSE SUPPORT COST				0										
TOTAL FACILITY PROJECT COST				11										
G. OTHER COSTS														
1. FACILITY PROVE-OUT COST														
2. MILITARY CONSTRUCTION APPN.														
TOTAL FACILITY PROJECT COST				2,283										
J. PRINCIPAL MILESTONES														
1. CONCEPT DESIGN COMPLETE														
2. FINAL DESIGN COMPLETE														
3. INITIAL/FINAL PROJECT AWARD														
4. CONSTRUCTION COMPLETE														
5. EQUIPMENT INSTALLATION COMPLETE														
6. PROVE OUT BEGINS														
7. PROVE OUT COMPLETE														
MONTH & YEAR														
Not Applicable														
Nov-97														
Mar-99/Mar-99														
Not Applicable														
Mar-00														
Not Applicable														
Not Applicable														
NARRATIVE EXPLANATION														
This project will upgrade Lone Star Army Ammunition Plant's computer hardware and software in order to improve administrative functions and reduce costs in the following typical categories: production control and planning, time and attendance, and the facilities engineering job estimating system. This effort will reduce costs, improve production efficiency, and improve compliance with Occupational Safety and Health Act (OSHA) requirements.														

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Environmental - Explosive Waste Incinerator (EWI) Upgrade		3. END ITEM SUPPORTED MODEL									
4. PROJECT NUMBER 5993337		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		7. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable		8. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable			
ELEMENT OF COST		FY 99		TOTAL		H. FACILITY		I. RELATED PROJECTS			
		QTY (a)	UNIT COST (b)	(c)		1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)	4. NAME	5. LOCATION	6. TYPE (GOCO, GOCO, COCO)
A. CONSTRUCTION COST				223							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.				528							
2.											
3.											
SUBTOTAL EQUIPMENT COST				528							
C. EQUIPMENT INSTALLATION COST				481							
D. CONTRACTOR SUPPORT COST				75							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				1,307							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST											
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION		<p>This project will purchase and install a wet scrubber for Building 97 - Explosive Waste Incinerator and provide installation of a structure to encompass the retort. Project also includes a trial burn test to ensure adequate control of fugitive emissions and renewal of air permit. This project is considered a Class 2, "Must Fund".</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Manufacturing Management System, Phase 1		3. END ITEM SUPPORTED MODEL Family of Scatterable Mines (FASCAM), Mines, Demolition (DEMO) Block									
4. PROJECT NUMBER 59933339		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable							
ELEMENT OF COST		FY 99		H. FACILITY		Iowa Army Ammunition Plant Middletown, Iowa GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME						
					2. LOCATION						
					3. TYPE (GOCO, GOCO, COCO)						
I. RELATED PROJECTS											
A. CONSTRUCTION COST					Project Number	Title	FY & Appn	Value (\$ mil)	Facing	Start Date	Compl Date
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.				1,259							
2.											
3.											
SUBTOTAL EQUIPMENT COST				1,259							
C. EQUIPMENT INSTALLATION COST				400							
D. CONTRACTOR SUPPORT COST				20							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				1,679							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
J. PRINCIPAL MILESTONES											
1. CONCEPT DESIGN COMPLETE											
2. FINAL DESIGN COMPLETE											
3. INITIAL/FINAL PROJECT AWARD											
4. CONSTRUCTION COMPLETE											
5. EQUIPMENT INSTALLATION COMPLETE											
6. PROVE OUT BEGINS											
7. PROVE OUT COMPLETE											
MONTH & YEAR											
Mar-97											
Nov-97											
Dec-99/Dec-99											
Not Applicable											
Dec-00											
Not Applicable											
Not Applicable											
Not Applicable											
NARRATIVE EXPLANATION											
This project will purchase and install a fiber optic backbone information infrastructure. This information infrastructure will connect Automatic Data Processing Equipment (ADPE) and data voice peripherals in a site-wide network foundation.											

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Instrumentation to Support Ammunition Production Testing		3. END ITEM SUPPORTED MODEL			Initial Production, production acceptance and product improvements						
4. PROJECT NUMBER 995080		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) n/a			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) n/c						
ELEMENT OF COST		FY		H. FACILITY		Yuma Proving Ground & Aberdeen Test Center Yuma, AZ and Aberdeen Proving Center, MD GOGO					
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOGO, GOCO, COCO)				
A. CONSTRUCTION COST											
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				1200							
C. EQUIPMENT INSTALLATION COST											
D. CONTRACTOR SUPPORT COST											
E. CORPS OF ENGINEERS SUPPORT COST											
F. OTHER IN-HOUSE SUPPORT COST											
TOTAL FACILITY PROJECT COST				1200							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST											
2. MILITARY CONSTRUCTION APPN.											
NARRATIVE EXPLANATION					<p>Yuma Proving Ground and Aberdeen Test Center perform and report results of production acceptance tests for ammunition end items. Ammunition acceptance testing require support from diverse facilities, equipment and instrumentation. The funds at Yuma will be used to replace machine and weld shop equipment, and continuation of upgrade of platform refrigeration package. At Aberdeen funds will procure instrumentation to support firing tests.</p>						

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL								February 1997
Production Support and Equipment Replacement		Load, Assembly, and Pack (LAP) of Primers, Detonators, Delays, Fuzes, and Volcano Items Including M88 Detonator, M53 Delay, and M55 Detonator								
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)
5995316		Not Applicable								Not Applicable
ELEMENT OF COST		FY 99		H. FACILITY		Lone Star Army Ammunition Plant				
		QTY	UNIT COST	TOTAL		Texarkana, Texas				
		(a)	(b)	(c)		GOCO				
A. CONSTRUCTION COST				1,082						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										
1.										
2.										
3.										
SUBTOTAL EQUIPMENT COST				0						
C. EQUIPMENT INSTALLATION COST				0						
D. CONTRACTOR SUPPORT COST				54						
E. CORPS OF ENGINEERS SUPPORT COST				0						
F. OTHER IN-HOUSE SUPPORT COST				0						
TOTAL FACILITY PROJECT COST				1,136						
G. OTHER COSTS										
1. FACILITY PROVE-OUT COST										
2. MILITARY CONSTRUCTION APPN.										
NARRATIVE EXPLANATION		<p>This project will provide for the rehabilitation of Fourth Street Road (to include gutters and curbs), and the repaving of Concord Church Road and Old Boston Road, which are all in fair to poor condition. Fourth Street is the main road to all areas of the plant for receiving and shipping of all production items. Concord Church and Old Boston roads access the XX Testing Area where production items are tested.</p>								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL Cord, Assemblies, and Pack (CAMP) of Various Ammunition and Mortar									
4. PROJECT NUMBER 5995317		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable							
ELEMENT OF COST		FY 99		H. FACILITY							
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)				
A. CONSTRUCTION COST				511	Milan Army Ammunition Plant Milan, Tennessee GOCO						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				1,000							
C. EQUIPMENT INSTALLATION COST				17							
D. CONTRACTOR SUPPORT COST				27							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				1,555							
G. OTHER COSTS				0							
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>Effort involves replacing a 41-year-old grinding machine with a Computer Numerically Controlled (CNC) machine for increased in-house capabilities, increased repeatability, and accuracy. A fluoroscope cabinet will be purchased to provide 360-degree x-rays of mortar rounds. A boiler monitoring system will allow all boilers to be monitored and adjustments made from one central location, additional safety features are included. A perimeter fence will be refurbished/replaced around a production area. Two roads will be resurfaced because of extensive deterioration.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE
2. PROJECT TITLE/TYPE		3. END ITEM SUPPORTED MODEL			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)					February 1997
Production Support and Equipment Replacement		Propellants and Explosives (Nitroglycerin and Nitrocellulose)								
4. PROJECT NUMBER		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5)			6. ANNUAL CAPACITY AFTER PROJECT (1-8-5)					
5995326		Not Applicable			Not Applicable					
ELEMENT OF COST		FY 99			H. FACILITY					
		QTY	UNIT COST	TOTAL	1. NAME	2. LOCATION	3. TYPE (GOCO, GOCO, COCO)	Radford Army Ammunition Plant Radford, Virginia GOCO		
		(a)	(b)	(c)						
A. CONSTRUCTION COST				1,275						
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)										
1.				208						
2.										
3.										
SUBTOTAL EQUIPMENT COST				208						
C. EQUIPMENT INSTALLATION COST				404						
D. CONTRACTOR SUPPORT COST				51						
E. CORPS OF ENGINEERS SUPPORT COST				76						
F. OTHER IN-HOUSE SUPPORT COST				0						
TOTAL FACILITY PROJECT COST				2,014						
G. OTHER COSTS				0						
1. FACILITY PROVE-OUT COST				0						
2. MILITARY CONSTRUCTION APPN.										
NARRATIVE EXPLANATION		<p>This project will rehabilitate Bridge 9102-2. Project will also replace the following items: control system at the Nitric Acid Concentrator/Sulfuric Acid, Concentrator (NAC/SAC) in Building 735; oil separator system in the C-Line Production Area; and sections of railroad in the Coal Storage Area, Powerhouse Building 400, Acid Area, and the area surrounding Building 456.</p>								

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL								Ammunition Items: 5.56mm, 7.62mm, .50 Caliber, 20mm	
4. PROJECT NUMBER 5995332		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable								6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable	
ELEMENT OF COST		FY 99		H. FACILITY		Lake City Army Ammunition Plant Independence, Missouri GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)	1. NAME 2. LOCATION 3. TYPE (GOCO, GOCO, COCO)						
A. CONSTRUCTION COST				740							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				509							
C. EQUIPMENT INSTALLATION COST											
D. CONTRACTOR SUPPORT COST				100							
E. CORPS OF ENGINEERS SUPPORT COST				35							
F. OTHER IN-HOUSE SUPPORT COST				22							
TOTAL FACILITY PROJECT COST				1,406							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>This project provides and installs an accumulator on bullet submodule 4 in Building 1. This project also replaces Production Quality Control System (PQCS) computers, telephone cable (south plant), bay water service lines (20mm, Building 139), and air compressors (building 91B). Further, this effort will relocate the public telephone network, install culverts, and rehabilitate conductive floors.</p>									

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL Family of Scatterable Mines (FASCAM), Mines, Demolition (DEMO) Block									
4. PROJECT NUMBER 5995333		5. ANNUAL CAPACITY BEFORE PROJECT (1-8-5) Not Applicable				6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable					
ELEMENT OF COST		FY 99		H. FACILITY		Iowa Army Ammunition Plant Middletown, Iowa GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				1,438							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.											
2.											
3.											
SUBTOTAL EQUIPMENT COST				65							
C. EQUIPMENT INSTALLATION COST				42							
D. CONTRACTOR SUPPORT COST				36							
E. CORPS OF ENGINEERS SUPPORT COST				85							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				1,666							
G. OTHER COSTS				0							
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION		<p>1. CONCEPT DESIGN COMPLETE</p> <p>2. FINAL DESIGN COMPLETE</p> <p>3. INITIAL/FINAL PROJECT AWARD</p> <p>4. CONSTRUCTION COMPLETE</p> <p>5. EQUIPMENT INSTALLATION COMPLETE</p> <p>6. PROVE OUT BEGINS</p> <p>7. PROVE OUT COMPLETE</p> <p>MONTH & YEAR</p> <p>Jan-97</p> <p>Nov-97</p> <p>Jan-99/Mar-99</p> <p>Jun-00</p> <p>Jul-00</p> <p>Not Applicable</p> <p>Not Applicable</p>									
<p>This project includes the replacement of vacuum pump to improve the quality of the molten explosive; purchase and installation of a dry sprinkler system in the document storage area; the installation of two sewage treatment wetlands to allow the plant to meet requirements of their National Pollution Discharge Elimination System (NPDES) permit, and asbestos insulation that has become an airborne/riable hazard. Four of the six items have environmental benefits.</p>											

INDUSTRIAL FACILITIES COST ANALYSIS (Dollars in Thousands)										1. DATE February 1997	
2. PROJECT TITLE/TYPE Production Support and Equipment Replacement		3. END ITEM SUPPORTED MODEL 120mm (M929, M934), 155mm (M107, M795, M825)									
4. PROJECT NUMBER 5995342		5. ANNUAL CAPACITY BEFORE PROJECT (1-4-5) Not Applicable		6. ANNUAL CAPACITY AFTER PROJECT (1-8-5) Not Applicable							
ELEMENT OF COST		FY 99		H. FACILITY		Scranton Army Ammunition Plant Scranton, Pennsylvania GOCO					
		QTY (a)	UNIT COST (b)	TOTAL (c)							
A. CONSTRUCTION COST				448							
B. EQUIPMENT COSTS (Individual equipment cost should be specified for all equipment costing more than \$0.5 million)											
1.				750							
2.											
3.											
SUBTOTAL EQUIPMENT COST				750							
C. EQUIPMENT INSTALLATION COST											
D. CONTRACTOR SUPPORT COST				559							
E. CORPS OF ENGINEERS SUPPORT COST				0							
F. OTHER IN-HOUSE SUPPORT COST				0							
TOTAL FACILITY PROJECT COST				1,806							
G. OTHER COSTS											
1. FACILITY PROVE-OUT COST				0							
2. MILITARY CONSTRUCTION APPN.				0							
NARRATIVE EXPLANATION					<p>This project will provide for rehabilitation of the deteriorated heat treat cooling tower which is critical to the continued operational capability of the Heat Treat Facility. It will replace the Dravo heating system throughout the facility, as all heaters have passed their expected life and are in poor condition. The project will also replace the old air compressors with new rotary air compressors. The old compressors are over 40-years old and have been rebuilt many times. This effort will provide for the rehabilitation of storm drains, drainage piping, and paved surface drainage collections throughout the facility which are all in a state of deterioration from 90-year use and modifications.</p>						
					<p>1. PROJECT NUMBER</p> <p>2. PROJECT TITLE</p> <p>3. PROJECT LOCATION</p> <p>4. PROJECT DESCRIPTION</p> <p>5. PROJECT STATUS</p> <p>6. PROJECT COST</p> <p>7. PROJECT COMPLETION DATE</p> <p>8. PROJECT START DATE</p> <p>9. PROJECT END DATE</p> <p>10. PROJECT BUDGET</p> <p>11. PROJECT ACTUAL COST</p> <p>12. PROJECT VARIANCE</p> <p>13. PROJECT RISK</p> <p>14. PROJECT IMPACT</p> <p>15. PROJECT BENEFIT</p> <p>16. PROJECT CHALLENGE</p> <p>17. PROJECT OPPORTUNITY</p> <p>18. PROJECT LESSON LEARNED</p> <p>19. PROJECT RECOMMENDATION</p> <p>20. PROJECT CONCLUSION</p>						

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY										February 1997
PROCUREMENT OF AMMUNITION / Ammunition Production Base Support					P-1 ITEM NOMENCLATURE					COMPONENTS FOR PROVE-OUT (EA0054)
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
QUANTITY	0	0	0	0	0	0	0	0		
COST (in millions)	1.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0		
<p>DESCRIPTION:</p> <p>This line provides for the prove-out and acceptance of prior year expansion, and initial production facilities projects. Detailed budget provided on the Program Cost Breakdown (Exhibit P-5).</p> <p>JUSTIFICATION:</p> <p>Funds are used to assure that the facility is capable of producing an acceptable end product, that manufacturer warranties are met, and that the facility is capable of producing at the design rate specified.</p>										

Ammo Cost Analysis		A. APPN / BUDGET ACTIVITY TITLE/NO PROCUREMENT OF AMMUNITION / 2 / Ammunition Production Base Support				B. WEAPON COMPONENTS FOR PROVE-OUT (EA0054)				C. MANUFACTURER NAME		D. DATE February 1997			
ID	CD	FY 96				FY 97				FY 98				FY 99	
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
Preparation of Demonstration Test Specifications (DTS)		174				191									
Preparation of Demonstration Test Plan (DTP) (DTP)		191				319									
Prove Out of PBS Projects															
5912245, Pyrotechnic - Safety Enhancement Lone Star Army Ammunition Plant (AAP)		950				460									
5952914, Packaging System for Bulk Explosives, Holston AAP		100				90									
TOTAL		1,415				1,060									

BUDGET ITEM JUSTIFICATION SHEET										DATE	February 1997
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE									
PROCUREMENT OF AMMUNITION / Ammunition Production Base Support		LAYAWAY OF INDUSTRIAL FACILITIES (EP2000)									
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003			
QUANTITY	0	0	0	0	0	0	0	0			
COST (in millions)	18.1	17.6	16.8	12.5	9.2	8.5	7.1	6.1			
DESCRIPTION:											
This line provides for the preserving, storing, and disposing of industrial facilities and equipment that are no longer required to support current production. Funding is required as follows:											
PROJECT NUMBER	FY 96	FY 97	FY 98	FY 99							
59X4050 INDUSTRIAL OPERATIONS COMMAND (IOC)	17.1	16.5	15.5	12.3							
LAYAWAY AND/OR REDISTRIBUTION OF GOVERNMENT OWNED EQUIPMENT IN GOVERNMENT OWNED PLANTS	(7.8)	(.6)	(8.6)	(2.9)	DECONTAMINATION						
	(7.4)	(2.6)	(6.6)	(7.2)	LAYAWAY						
	(1.9)	(13.3)	(0.3)	(2.2)	MODIFIED CARETAKER						
59X9589 INDUSTRIAL OPERATIONS COMMAND (IOC)	1.0	1.1	1.3	0.2							
LAYAWAY AND/OR REDISTRIBUTION OF GOVERNMENT OWNED EQUIPMENT LOCATED IN CONTRACTOR PLANTS	(0.0)	(0.0)	(0.1)	(0.1)	DECONTAMINATION						
	(0.2)	(1.2)	(1.2)	(0.1)	LAYAWAY						
	(0.8)	(0.0)	(0.0)	(0.0)	MODIFIED CARETAKER						
TOTAL LAYAWAY OF INDUSTRIAL FACILITIES	18.1	17.6	16.8	12.5							
JUSTIFICATION:											
Funds are used for the protection and preservation of equipment and facilities no longer required for active production but must be retained for possible future peacetime or replenishment production needs. Included are those funds needed to cover the packaging, handling, and transportation (PCH&T) costs for moving equipment to a disposal point or storage site; decontamination; and plant clearance requirements.											

BUDGET ITEM JUSTIFICATION SHEET					DATE	
APPROPRIATION / BUDGET ACTIVITY		February 1997				
PROCUREMENT OF AMMUNITION /Ammunition Production Base Support		P-1 ITEM NOMENCLATURE				
LOCATION	PROJECT TITLE	PROJECT	FY 1996	FY 1997	FY 1998	FY 1999
Iowa Army Ammunition (AAP), Milan AAP, Lone Star AAP, Holston AAP	Retain (RT) - Layaway (Lwy) Minor Efforts	59X8000			.141	.121
Milan AAP, Lone Star AAP, Iowa AAP, Lake City AAP	Downsize (DS) - Packaging, Crating, Handling, and Transportation (PCH&T) (Various)	59X8200			.104	.102
Holston AAP Kingsport, TN	RT- Lwy Building 8, Boilers 3, 5, and 6	5988714			3.512	
Holston AAP Kingsport, TN	DS - Environmental, Asbestos Removal, Plant-Wide	5998708				1.169
Holston AAP Kingsport, TN	RT - Lwy, Decontamination, and Preserve Research Department Explosive/High Melt Explosive (RDX/HMX), Acid Production Equipment, and Support Facilities	5998905				7.010
Iowa AAP Middletown, IA	RT - Lwy M913; 105mm Projectile; Load, Assemble, and Pack (LAP)	5998904				.083
Joliet AAP Joliet, IL	DS - Environmental, Transition Load, Assemble, and Pack (LAP) Facility In Accordance With Public Law 104-106	5998906				1.618
Lake City AAP Independence, MO	RT - Reserve Small Caliber Capacity, Phase 3	5988808			.528	

BUDGET ITEM JUSTIFICATION SHEET				DATE		
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE				
PROCUREMENT OF AMMUNITION /Ammunition Production Base Support		LAYAWAY OF INDUSTRIAL FACILITIES (EP2000)				
LOCATION	PROJECT TITLE	PROJECT	FY 1996	FY 1997	FY 1998	FY 1999
Lake City AAP Independence, MO	DS - Transition to Modified Caretaker, Phase 3	5998921				2.158
Lone Star AAP Texarkana, TX	RT - Lwy M67 Grenade Equipment, O-Line	5988627			.370	
Radford AAP Radford, VA	RT - Lwy Can Pack Line	5988810			.099	
Ravenna AAP Ravenna, OH	DS - Environmental, Quarry Landfill/Pond Closure	5988739			4.856	
Riverbank AAP Riverbank, CA	DS - Environmental, Dispose of Contaminated Sulfuric Acid Pipes	5988812			.270	
Scranton AAP Scranton, PA	RT - Partial Lwy M107/Mark (MK) 64 Equipment	5988731			.593	
Sunflower AAP DeSoto, KS	DS - Environmental, Inactivation and Closure of Burning Ground	5988634			2.876	
Crane Army Ammunition Activity Crane, IN	RT - Lwy Bag House/Accumulator for 5'/54 and 5'/38 Projectile	5988811			.270	
McAlester AAP McAlester, OK	DS - Modified Caretaker, Boiler House and Related Components	5988725			.306	

BUDGET ITEM JUSTIFICATION SHEET				
APPROPRIATION / BUDGET ACTIVITY		DATE	February 1997	
PROCUREMENT OF AMMUNITION /Ammunition Production Base Support		P-1 ITEM NOMENCLATURE	LAYAWAY OF INDUSTRIAL FACILITIES (EP2000)	
LOCATION	PROJECT TITLE	PROJECT	FY 1996	FY 1997
Pine Bluff Arsenal Pine Bluff, AR	RT - Lwy Buildings and Equipment for Grenade Smoke (SMK), Red Phosphorus (RP), L8A3	5988728	.562	
Pine Bluff Arsenal Pine Bluff, AR	RT - Lwy M8 Fill and Press	5988813	.528	
Pine Bluff Arsenal Pine Bluff, AR	RT - Lwy High Capacity (HC) Mixing Facility	5988814	.472	
Olin, Alliant, KDI Precision Products	RT - Lwy Minor Efforts Under \$50,000	59X9000	.080	.101
Alliant, Olin, EMCO, Amron Corporation	DS - PCH&T	59X9200	.108	.117
Alliant Techsystems, Inc., New Brighton, MN, or Olin-Downey Corporation, Downey, CA	RT - Combined Effects Munitions (CEM) Equipment	5989503	1.075	
TOTAL			16.750	12.479

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY										February 1997
PROCUREMENT OF AMMUNITION /Ammunition Production Base Support					P-1 ITEM NOMENCLATURE					MAINTENANCE OF INACTIVE INDUSTRIAL FACILITIES (EP1500)
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
QUANTITY	0	0	0	0	0	0	0	0		
COST (in millions)	17.5	31.9	23.0	19.0	17.4	16.2	15.9	15.0		
<p>DESCRIPTION:</p> <p>This line provides for the maintenance of laidaway portions of active plants, care and maintenance of laidaway plants, and the storage, protection, and maintenance of laidaway Government-owned equipment being stored on-site at contractor-owned plants. Detailed budget estimates, by location, are provided on the Program Cost Breakdown (P-5). The following is a summary of funds required.</p> <ul style="list-style-type: none"> (1) Inactive Production Lines/Areas at Active Plants (FY 98 - \$10.0) (FY 99 - \$9.8). (2) Inactive Production lines/Areas at Inactive Plants (FY 98 - \$12.7) (FY 99 - \$8.9). (3) Inactive Production Lines/Areas at Contractor Plants (FY 98 - \$0.3) (FY 99 - \$0.3). <p>JUSTIFICATION:</p> <p>Funds are used for the maintenance of laidaway ammunition industrial facilities to include utilities, buildings, nonseverable equipment, plant equipment, special tooling, and special test equipment being retained as part of approved plant equipment packages which are required to support future replenishment requirements. Also includes a fair share of the recurring overhead costs such as grounds maintenance, fire protection, plant security, and administrative support.</p>										

Ammo Cost Analysis		A. APPN / BUDGET ACTIVITY TITLE/NO PROCUREMENT OF AMMUNITION / 2 / Ammunition Production Base Support				B. WEAPON MAINTENANCE OF INACTIVE INDUSTRIAL FACILITIES (EP1500)				C. MANUFACTURER NAME				D. DATE February 1997			
Ammunition Cost Elements		FY 96				FY 97				FY 98				FY 99			
ID	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	
INACTIVE LINES AT ACTIVE PLANTS																	
		72			164						165			169			
Crane Army Ammunition Activity (AAA)		500			1,217						1,887			2,756			
Holston Army Ammunition Plant (AAP)		0			863						930			951			
Iowa AAP		91			94						95			97			
Indian Head		583			2,086						506			638			
Lake City AAP		295			307						319			636			
Lone Star AAP		0			221						222			227			
McAlester AAP		674			700						1,213			1,240			
Milan AAP		424			1,658						1,666			0			
Pine Bluff Arsenal		329			2,740						3,004			3,071			
Radford AAP		732			400						0			0			
Seneca/Hawthorne Army Depot																	
SubTotal		3,700			10,450						10,007			9,785			
INACTIVE PLANTS																	
		4,074			3,379						3,225			3,199			
Badger AAP		53			56						66			67			
Cornhusker AAP		916			0						0			0			
Fort Worth Corps of Engineers (COE)		0			150						622			0			
Joliet AAP		0			935						0			0			
Kansas AAP		711			4,503						485			331			
Longhorn AAP		683			1,908						323			165			
Louisiana AAP		0			2,336						2,519			2,575			
Mississippi AAP		88			0						0			0			
Newport Chemical Activity		754			803						806			825			
Ravenna AAP		1,533			750						1,474			1,522			
Riverbank AAP		191			300						263			0			
Scranton AAP		2,158			4,013						2,720			34			
Sunflower AAP		0			311						216			220			
Twin Cities AAP		2,342			1,376						0			0			
Volunteer AAP																	
SubTotal		13,503			20,820						12,719			8,938			
INACTIVE LINES AT CONTRACTOR PLANTS																	
		134			427						216			220			
Alliant Techsystems Incorporated		59			46						45			45			
AMRON Corporation (Antigo/Waukesha)																	

Ammo Cost Analysis		A. APPN / BUDGET ACTIVITY TITLE/NO PROCUREMENT OF AMMUNITION / 2 / Ammunition Production Base Support				B. WEAPON MAINTENANCE OF INACTIVE INDUSTRIAL FACILITIES (EP1500)				C. MANUFACTURER NAME		D. DATE February 1997			
ID	CD	FY 96		FY 97		FY 98		FY 99		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty							UnitCost
		\$000	Each	\$000	Each	\$000	Each	\$000	Each	\$000	Each	\$000	\$000	Each	\$000
Dayron (Valentec)		0				13							12		
Intercontinental Manufacturing Company		107				111							0		
(IMCO)															
SubTotal		300				597				274			277		
TOTAL		17,503				31,867				23,000			19,000		

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE								February 1997
		PROCUREMENT OF AMMUNITION/ACTIVITY 2				CONVENTIONAL AMMUNITION DEMILITARIZATION (EP1800)				
		FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
QUANTITY		0	0	0	0	0	0	0	0	0
COST (in millions)		97.5	95.5	106.1	93.8	94.7	94.1	96.2	98.4	

DESCRIPTION:

The conventional ammunition demilitarization program funds the disposal, demilitarization, and resource recovery and recycling of conventional ammunition. This program also funds the movement of ammunition and technical support in support of demilitarization projects at various installations, and the commercial contracts for resource recovery/demilitarization of excess, obsolete, and unserviceable ammunition. Safety demilitarization is also funded for those ammunition assets which have become unsafe for continued storage.

JUSTIFICATION:

As of 30 Sep 96, the conventional ammunition demilitarization account contained over 395,000 short tons of ammunition. An increasing portion of the existing serviceable ammunition inventory of all Services is becoming excess to requirements. Additionally, ammunition which is in an unserviceable but repairable condition is being placed in the demilitarization account because the cost to repair and/or is not cost effective.firm . The net result of the changing situation has been a tremendous increase in the quantity of ammunition either currently requiring demilitarization or forecast to enter the demilitarization account. In FY 1996, demilitarization accomplishments totaled 126,645 short tons, the highest level ever achieved; however, an additional 217,200 short tons were generated. Future generations of ammunition into the demilitarization account are forecasted to approach 700,000 short tons total over the next 5 years. FY 1997 accomplishments are projected to be approximately 114,000 short tons. The accumulation of ammunition requiring demilitarization has a direct impact on the Army's ability to effectively support contingency operations - the demilitarization stocks simply get in the way of mobility operations. In addition, Base Realignment and Closure actions require that stock be moved into already crowded depot storage locations, thereby increasing the probability that demilitarization stocks are malpositioned for the end state depot assignments. There is also a safety consideration in that ammunition stocks are becoming older and potentially less stable.

Cost Analysis Exhibit (P-5)		A. APPN / BUDGET ACTIVITY TITLE/NO PROCUREMENT AMMUNITION, ARMY/ACTIVITY 2				B. WEAPON CONVENTIONAL AMMUNITION DEMILITARIZATION (EP1800)				C. MANUFACTURER NAME		D. DATE	
ID	CD	FY 96		FY 97		FY 98		FY 99					
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
WP/PWP		863	479		1827	2255		3600	4545		1164	1000	
RIOT CONTROL		6427	3774		2379	963		1277	750		1703	1000	
SMOKES, HC, COLORS, FS		627	613		1769	1423							
DEPLETED URANIUM/TUNGSTEN CARBIDE		3071	2400		3186	2840		2820	1500		2820	1500	
PYROTECHNICS/ILLUMINATION/NON FRAG TRA		1688	1500		3335	1697		1974	450		4387	1000	
HE BOMBS		3657	11789		3977	10404		13220	20000		4560	10000	
HE CARTRIDGES		16229	25500		16947	22925		11575	15000		13625	15000	
HE EXPLOSIVE "D"		6767	10255					5040	4000		5890	5000	
BULK HIGH EXPLOSIVES													
HE GRENADES													
HE DEPTH CHARGES													
HE ICM/CBU & SUBMUNITIONS WTV		11633	37142		21404	27592		6825	25000		973	1000	
HE MISSILES		2122	1840		34	112					3890	15000	
HE PROJECTILES & WARHEADS		11065	12180		12867	13923		23790	30000		15860	20000	
HE ROCKETS		67	69		1241	2548		183	500		183	500	
DEMOLITION MATERIAL		1247	1317		816	2457		1644	1970		488	500	
HE LAND MINES		55	1181		291	1213					417	500	
INERT											231	500	
BULK PROP													
PROPELLANT CHARGES & INCREMENTS		3697	10517					11075	15000		8750	10000	
PROPELLENT MUNITIONS/COMPONENTS		1785	2741					6233	8000		6233	8000	
SMALL ARMS AMMO THRU 20MM		13	4		11944	13955		2055	5200		2055	5000	
INCINERABLE MUNITIONS					1356	960		739	750		2693	2800	
FUZES		2746	2994		1042	1244		1754	3000		1633	2500	
MULTIPLE FAMILY		12497	5527		2498	1791		2314	2500		6287	2500	
NO FAMILY		143	236										
OCONUS DEMIL		11100	12500		8600	6000		10000	20500		10000	20000	
GRAND TOTAL		97479	144558		95513	114302		106118	158665		93842	123300	

BUDGET ITEM JUSTIFICATION SHEET										DATE
APPROPRIATION / BUDGET ACTIVITY										February 1997
Procurement of Ammunition, Army, Activity 2										
P-1 ITEM NOMENCLATURE										
Amament Retooling and Manufacturing Support (EP2500)										
QUANTITY	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
	0	0	0	0	0	0	0	0		
COST (in millions)	44.8	45.0	5.0	0.0	0.0	0.0	0.0	0.0		0.0

DESCRIPTION:

The Armament retooling and Manufacturing Support (ARMS) Initiative allows the commercialization of the idle capacity at active and inactive government-owned, contractor-operated (GOCO) ammunition industrial facilities. Congress enacted this program in Fiscal Year 1993 Defense Authorization Act, Public Law 102-484. ARMS uses financial incentive, such as facility strategic reuse plans; marketing plans; building modification; equipment - relocation, alteration, or consolidation; environmental baseline studies, and loan guarantees. ARMS objectives include clued reducing facility operating/ownership costs; lower facility maintenance; opportunities for small businesses; critical skill retention; sustaining economic development, and developing a model for defense conversion.

JUSTIFICATION:

The Army's ammunition industrial base is unique. It involves handling and processing of hazardous materials, represents a large investment and requires critical skills. As a Single Manager of Conventional Ammunition resource, all Services depend on our ammunition industrial base to meet peacetime and replenishment requirements. Historically, in peacetime the ammunition industrial base has been either maintained or abandoned in reduced numbers and readiness condition. To met our peacetime and replenishment needs this critical capability must be maintained on active facilities and inactive facilities t minimal costs while retaining efficiencies. Realizing this challenge, in 1990 the Army initiated the facility use contracting concept to attract government (defense and non-defense) and commercial subcontractors to GOCO ammunition facilities with little success. The ARMS initiative provide the catalyst to commercialize active and inactive ammunition facilities. This results in product diversification promoting a strong industrial base. approaching cost efficiencies, and ensuring essential capabilities when required. It capitalizes on existing assets, while the Army benefits by lower maintenance and fixed overhead expenses, maintaining industrial readiness, retaining skilled workers, and a viable base for peacetime and replenishment needs.